

MANUFACTURERS' RECORD

A WEEKLY SOUTHERN INDUSTRIAL
RAILROAD AND FINANCIAL NEWSPAPER.

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No. 16.

Baltimore, November 22, 1890.

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THE ST. CLAIR TUNNEL COMPANY.

CHIEF ENGINEER'S OFFICE, HAMILTON, ONT., October 2, 1890.

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Yours truly, JOSEPH HOBSON, Chief Engineer.

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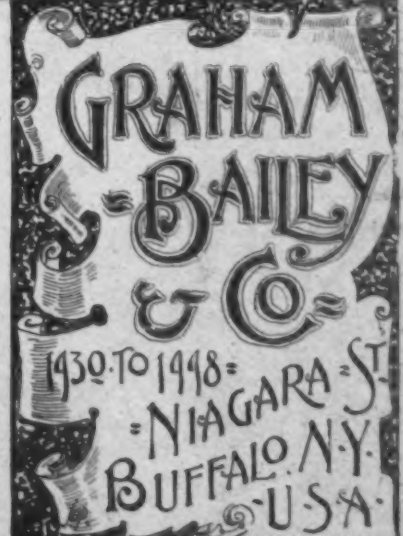
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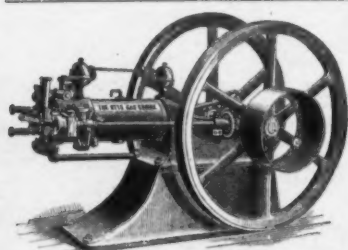
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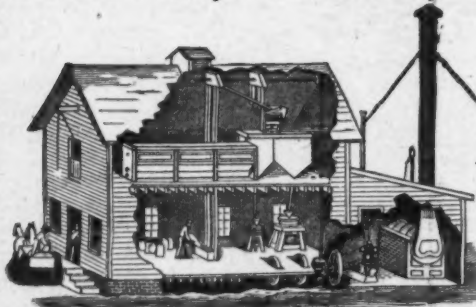
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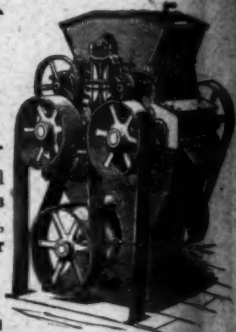


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MANUFACTURERS' RECORD

A Southern Industrial, Railroad and Financial Newspaper.

VOL. XVIII. No. 16.
WEEKLY.

BALTIMORE, NOVEMBER 22, 1890.

\$4.00 A YEAR.
SINGLE COPIES, 10 CENTS.

Manufacturers' Record.

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BALTIMORE, NOVEMBER 22, 1890.

The Manufacturers' Record.

[From the Chattanooga Daily News.]

Nearly a decade has passed since the Baltimore MANUFACTURERS' RECORD made its first bow to the industrial world and declared its intention of working for Southern development. At that time but little was known of the resources of the South, and that nothing had been written or published in regard to this section, but because Northern capitalists did not believe the stories told of our wonderful richness.

They considered these stories the concoctions of speculators—inventions of land agents and traders to victimize the credulous. One-sixth of a century had passed since peace had been declared, and still a "wall or partition" seemed to separate the North from the South. There seemed to be a general want of confidence. There was a necessity for a medium that could establish this confidence. The field was not an inviting one by any means. It required nerve and confidence in the South's future to assume the risk.

The North had the money and experience, but lacked confidence in the existence of Southern resources. This want of confidence prevented Southern development. A medium was needed—one in which both sections could rely. This the MANUFACTURERS' RECORD undertook, and in fact, knowing that this was the only means by which it could accomplish its purpose. Truth was nailed to its masthead, and, cost what it would, nothing but official statements satisfied it. In this way it has established a confidence that has led to the investment of billions of dollars in Southern enterprises, and to-day

the journal is able and willing to stand on its own record. It has made its own record—a record of which it has just cause to be proud.

From the first its projectors had absolute faith in the South, but, while this was so, they knew that it was no easy matter to convince the world that what they said about the Southland was true; hence, at the very outset they adopted the policy of correctness in what they published, and to-day, if the Baltimore MANUFACTURERS' RECORD says a thing is true, or is given as fact, whether the reader be in the North or in the South, there is not a doubt as to the correctness of the publication—a reputation worth more to the MANUFACTURERS' RECORD than gold—a confidence, the existence of which has brought more capital into the South than any publication on earth. "If the MANUFACTURERS' RECORD says it is so there is something in it," is a common expression wherever the journal is read.

Only nine years have passed since it joined its fortunes to those of the rising South, and fought for Southern development, and to-day it is one of the largest weekly journals in existence—a fact that shows its labors are appreciated. As an exponent of Southern development it has no peer, and the existing confidence established between the two sections of the country is largely due to its teachings. That its work is appreciated by the friends of national progress there can be no doubt, for to-day there is a shower of witness letters of encouragement of a very gratifying nature—letters from Europe and from all parts of this country. It has been a steady and constant exponent of the resources of this country, and has been instrumental in bringing millions into it which have been making the investors rich. It is now looked to as the most reliable source of information and guidance in placing investments and locating industries.

All honor to that great friend of the South—the MANUFACTURERS' RECORD, of Baltimore.

[The MANUFACTURERS' RECORD very heartily appreciates such words of praise as these, which are con-

stantly coming from the press and the people of the South. No effort will be spared in the future, as none has been in the past, to press forward still more vigorously the advancement of the whole South.—
Editor MANUFACTURERS' RECORD.]

The Room For New Towns In the South.

People who fear that too many new towns are being started forget that in the great mineral belt that stretches from Shenandoah Junction, where the Baltimore & Ohio and the Shenandoah Valley Railroad cross, to Birmingham, unquestionably the most remarkable region of America, if not of the world, there are practically no cities. Here is a territory about 700 or 800 miles long by 150 to 200 wide, a region capable of supporting with ease a greater population than the 62,000,000 that now people the whole country, and yet in that vast region of boundless resources there are scarcely five towns of over 10,000 people. Between Hagerstown and Roanoke, a distance of about 240 miles, there is not over one town of 5,000 population; at Roanoke we find about 18,000 and at Salem, adjoining, about 5,000, and then, unless Bristol can show 5,000, we must pass several hundred miles more, or from Roanoke to Knoxville, before we find a place of even 5,000. Knoxville to Chattanooga and Chattanooga to Birmingham and we find a territory that ought to have and will have towns of over 10,000 population each for every village of 500 that now exists.

Where are the people to come from?

The South could almost double its present town population from the surplus of the agricultural districts alone. Until five years ago all of the women and one half of the men in the South were practically without employment. With nothing in their reach except agriculture, there was not work enough for one-half of the South's male population, and the

large class of women and girls who in the North support themselves were in the South almost wholly idlers of necessity and not of choice. The building of towns and cities is furnishing a place for these people and drawing the great surplus from the agricultural districts to the centers of industry. This alone would furnish population to 100 towns of 10,000 population each or more. Natural increase will add 4,000,000 or 5,000,000 to the South's population in the next ten years. The annual drain of tens of thousands of young men who have heretofore gone West because of the lack of employment in the South is ceasing. There is work at home now for all, young and old.

But these are not all the sources from which the South will draw population for its new towns. The increase in the population of the United States during the next ten years will be 18,000,000 to 20,000,000, or just about the present population of the entire South from Maryland to Texas. These fourteen Southern States have a total population of 19,000,000. The increase in the whole country in ten years will be 18,000,000 to 20,000,000. Where is this enormous population going? Southward. From New England, which formerly sent its hundreds of millions of capital and its hundreds of thousands of young men to the West to build up that mighty empire the tide of men and money has turned to the South; from the great West, from Kansas to Dakota, there is a steadily swelling stream moving Southward.

Town building in the South has practically just started. There are only two or three States—Virginia, Alabama and Tennessee—in which there has been any general activity in that line. These States will keep up their good work, and the others will rapidly follow their example.

If you are not already a subscriber to the MANUFACTURERS' RECORD, send us \$4 and you will receive it regularly for one year, or six months for \$2.00.

Public Lands in the South.

It is not generally known, but it is a fact that there are in the South more than 14,000,000 acres of public lands subject to the national homestead and pre-emption laws now in force. These are, surveyed and unsurveyed, distributed among the several States as follows:

	Acres.
Alabama.....	1,105,660
Arkansas.....	4,992,329
Florida.....	5,624,426
Louisiana.....	1,358,823
Mississippi.....	1,467,480
Total.....	14,398,118

It must not, however, be supposed that all these lands are suitable for human occupation, although all are open to purchase under the several laws governing the sale of government lands. The majority of the unsurveyed lands are swamp lands affected by all the laws that have passed for three decades affecting them. Knowing this, the MANUFACTURERS' RECORD asked Hon. Lewis A. Goff, commissioner of the land office in the Interior Department, for information as to what lands there were in the South on which people could live and thrive, and which belonged to the United States and were open to settlement under the land laws of the country. Commissioner Goff was also requested to give these facts in his next statistical report. That official, fully appreciating the importance of the request, cordially complied with it, and he has kindly forwarded to the MANUFACTURERS' RECORD advance copies of his report, covering all the government lands in the United States and furnishing details as to those in the Southern States. As this has not been done in many years by his predecessors in the land office, we gladly place on record our appreciation of his broadness in this respect.

In the Southern States there are of surveyed and unsurveyed lands in the States named nearly 14,400,000 acres. The surveyed lands, all of which are open to purchase and settlement under the United States land laws, are enumerated in the following table:

States.	Land district offices.	No. of counties.	Acres.
Alabama.....	3	66	1,105,660
Arkansas.....	4	88	4,992,329
Florida.....	1	42	5,624,426
Louisiana.....	2	55	1,358,823
Mississippi.....	1	49	1,467,480

Total of available lands in five Southern States, suited to occupation and open to purchase under the national land laws..... 10,941,955

Here then we have a total of nearly 11,000,000 of acres in five Southern States that belong to the government, every acre of which is suitable for human habitation, most of which are covered with virgin forests, and on all of which, when cleared, agricultural industries may be prosecuted to greater advantage than they can be anywhere in the West. And in addition there are about 3,500,000 of swamp lands—so called—many of which, if properly drained, would be exceedingly fertile, and nearly all of which are covered with growths of valuable timber. Nor is this all. In Alabama are an unknown but large

number of surveyed acres in which are iron and coal, that, by a law enacted March 3, 1883, were withdrawn from the operation of the national laws affecting government lands; and besides these there are in the same State 12,520 acres of choice lands that the government will sell at private entry for the benefit of the Cherokee school fund, they being the remainder of what was set apart for that purpose.

"Go West, young man" has been a favorite motto at the North since the late Horace Greely formulated that exhortation. "Go South, young man," ought to be the motto at the North in our day, for the opportunities for getting excellent land in its favored clime are far superior to what exists now in the West, while the advantages resulting from climate, soil and nearness to profitable markets are as five to one in favor of the latter.

THE news of important gold discoveries in the Indian Territory has been confirmed by a trustworthy correspondent, who with others made a careful investigation. Replying to an inquiry from the MANUFACTURERS' RECORD, he says: "Gold is there in paying quantities, both in ledge and placer deposits; also silver, copper and a high grade of coal. A company of twenty-two men, one-half of whom are full-blooded Indians, has been organized, and secured a charter from the Cherokee nation for 25 square miles." The consideration for this exclusive grant is that the company shall pay a royalty of 2 per cent. to the Indians, of which the Chickasaws are to receive one-fourth and the Choctaws three-fourths. The latter tribe owns three-fourths of the land on which the Chickasaws live, but it has no voice in the latter's legislature, and can have nothing to do with the management of the land so long as it accepts a three-quarters interest in whatever leases may be made by the Chickasaws. The practical result of this charter, unless Congress interferes to prevent it, will be to throw into the hands of a few shrewd white men what is described as one of the richest spots on the globe. The land of the Chickasaw nation begins about six miles from Gainesville, Texas. Paul's valley is but a continuation of the fertile lands of Northern Texas, but the hills on either side contain much mineral wealth. If this property belongs to the Indians some measures should be taken for protecting them, otherwise, when development has opened up the earth's treasures, and money begins to circulate freely in that district, there will be danger of serious disturbances among the Indians themselves, and between them and the white miners. If, on the other hand, the mineral laws of the United States have jurisdiction over Indian Territory as they have in other Territories, then it would seem as though the government ought to enforce them without delay.

Can We Build Furnaces Enough to Meet the Demand for Iron

The MANUFACTURERS' RECORD recently published some extracts from the speech of Hon. Abram S. Hewitt before the Iron and Steel Institute in which he took the same ground as Mr. Edward Atkinson, that the demand for iron is growing so rapidly that it will be difficult to produce it rapidly enough to meet consumptive requirements. It is not a question of how to find a market for the product of new furnaces, but how to build enough new furnaces to supply the demand. In his speech, after showing how enormous the demand for iron and steel will inevitably be, Mr. Hewitt said:

The question presents itself whether this vast demand can be met without such an increase in price as will tend to restrict the use of iron within narrower limits. The increased call upon the European countries is too small to make any embarrassment, except such as may arise from the fuel and food questions, both of which are serious problems in the European industrial world. The answer to the question must, therefore, come from the United States, and in view of the changed relations of the two continents in regard to the supply of iron, it will be seen that tariff legislation will henceforth play no part in the solution of the problem. According to the traditions of the Institute of Mining Engineers it is not permissible to discuss commercial questions, but there is no impropriety in calling attention to the fact that one of the perplexing elements in the consideration of the future of the iron business is removed from the problem when the conclusion is reached that henceforth it will task the ability of Europe to supply its own demand for crude iron, and the United States must look to its own resources for the supply of the great demands of the coming century.

So far as we are concerned, then, the question is substantially whether this country can nearly double its production in the next ten years without so seriously increasing the present cost of iron as to restrict the consumption and arrest the rate of progress at which the world is now moving forward.

CHARLESTON, S. C., has great reason for self congratulation. A successful negotiation has been made that furnishes the opportunity for others of still greater magnitude. It is well known that the South Carolina Railroad has been for about a year in the hands of a receiver, ex-Governor D. H. Chamberlain. Under his administration the road-bed has been repaired, steel rails have been laid and many long-needed improvements have been made. Its traffic has been materially increased. "Old Reliable," as that road has long been fondly called by South Carolinians, has been brought to a condition of greater usefulness than has been the case for 25 years. The new deal consists in the purchase by the East Shore Terminal Co. of the Blackville, Alston & Newberry and the Barnwell Railroads, and it is expected that this will ultimately be followed by their consolidation with the South Carolina Railroad. The Charleston News and

Courier speaks of this consummation with pardonable exultation, saying:

The purchase of the Barnwell Railroad and of the Blackville, Alston & Newberry Railroad in the interest of the East Shore Co. is a happy omen, as we believe, of the approaching deliverance of this city from the unjust discriminations of hostile railroad syndicates and combinations. It means, as we take it, that the South Carolina Railway, with all of its natural feeders in this State, is to be bought and controlled in the interest of Charleston, and that an extensive system of roads controlled by local capital, or by those interested in local enterprises and local development, is to be established, by means of which Charleston will not only recover a large part of its lost trade, but will secure the trade of a vast section of the country which has heretofore been out of our reach.

Governor Chamberlain, to whom the initiative of this negotiation is generally credited, is reported to have said:

The East Shore Terminal Co. has now a very valuable property in Charleston, and three valuable feeders and allies of the South Carolina Railway—the Cumberland Gap Railroad, the Barnwell Railroad and the Blackville, Alston & Newberry Railroad. If now the East Shore Terminal people, with others interested in the real welfare of the South Carolina Railway, will reorganize the latter in the interest of its creditors and of the people of the State, the results will be more valuable and auspicious to the city of Charleston than anything that has occurred here within many years.

Everyone will rejoice with the people of Charleston in their brightened prospects, and will hope that their highest expectations may be more than fulfilled.

"Hogging" the Basic Steel Patents.

"Hogging" is not a very classical or elegant word, but it exactly expresses the situation as to the basic steel patents in the United States. Ever since 1881 the American owners of these patents have been "hogging" them with all that that term implies. The Baltimore MANUFACTURERS' RECORD is not alone in the protest against this rank injustice to the industrial interests of the country, nor is the South the only section that is suffering from its effects. The course of the Bessemer Steel Co., Limited, and its successor, the Steel Patents Co., strikes every impartial observer as selfish, and selfish only. Instead of buying these very valuable patents for introduction into this country, the present owners appear to have obtained possession of them for the purpose of forbidding their use. What else can have been the motive for demanding of the Roane Iron Co. the payment of a royalty of \$1 per ton for all steel made by the basic process, with a bonus of \$50,000 in advance? For what other reason did the Steel Patents Co. refuse to grant a license to the Southern Iron Co., of Chattanooga? The Iron Trade Review is interested in all that pertains to the development of the Bessemer steel industry, but it holds very decided opinions as to the utter selfishness of the Steel Patents Co. It cannot be defended upon the ground of expediency, common sense or common justice.—Cleveland Iron Trade Review.

The MANUFACTURERS' RECORD believes that the South will soon be absolutely independent of the basic patents for steel making.

A Good Thing For Virginia.

Mr. F. J. Kimball, president of the Norfolk & Western Railroad Co., which recently purchased the Shenandoah Valley Road, announces that this road will at once be put in thorough repair. Old trestles will be removed and new ones will be put in their place, and iron viaducts will be substituted for the higher ones. It is the intention of the company to make the road first class in every respect. The Norfolk & Western has been the most progressive railroad in the South in the way of pushing the development of new towns and creating an enormous local traffic by this means. In eight years it has secured the investment of over \$135,000,000 in cash in the development of Virginia's resources, the building of new towns and iron works and the construction of its own line.

The entire State is to be congratulated that this same progressive spirit and tireless energy is to be infused into the Shenandoah Valley Railroad Co. The result will be the active development of many big industrial centers along the entire line from Hagerstown, the Northern, to Roanoke, the Southern terminus. There is room enough along that line for more large industrial towns than there are villages to-day.

LAST week two steamers sailed from New York for London, one carrying four hundred, the other two hundred choice beeves, the pick of the famous herds of C. Alexander, of Paris, Ky. These animals were of an average weight of 1,950 pounds, and were sold at \$5.25 per hundred at the farm. Over sixty thousand dollars' worth of choice beef is Kentucky's contribution to the yule-tide feasts of the nobility and gentry of England this year. For centuries "the roast beef of old England" was celebrated in song and story, and the "mighty rounds" of "the squire's table" were always instanced as examples of solid good living. But now most of the beef on which the Britons feed was fattened on far-away pastures, and when "the gladsome Christmas" draws near, Kentucky is called upon for her best, and ships it gladly.

THE Premier of the Spanish government, Signor Canovas del Castillo, has requested the president of the Chamber of Commerce and the manufacturing and trade organizations of Cuba to select a representative committee to go to Madrid for a conference respecting the negotiation of a reciprocity treaty between this country and Spain. "La Lucha," an influential Havana journal, which favors an amicable treaty arrangement with the United States, takes Spain's Prime Minister to task for his apparent indifference to the best interests of Cuba. In a forcible editorial the facts are brought out that sugar is the mainstay of that "ever faithful isle," and that the United

States is Cuba's best customer. Attention is called to the complete knowledge the American Department of State has of the geography, productions, financial and social conditions; in fact, of everything that concerns the island, while the Spanish Premier seems to know very little about them. The call for a committee of conference at Madrid is an indication that these editorials have set the home government to thinking. Whether thought will be followed by action remains to be seen.

THE following letter from Mr. E. M. Heroy, a prosperous merchant of Houston, Texas, narrates his experience. He says: "Some time ago I wrote to the MANUFACTURERS' RECORD that I would probably be in the market for heating apparatus for a large building, and your note to that effect in your 'Wants' columns brought me in inquiries from all parts of the country, and I have been in correspondence with some of these parties and will soon place an order for a heater. Please accept my thanks for the favor done me in so thoroughly placing my wants before the parties most concerned. I appreciate the MANUFACTURERS' RECORD very much and value the information it contains." Mr. Heroy has but shared in the universal experience of those who have made their wants known through this paper. Not only those who wish to buy, but those who advertise what they have to sell, are invariably pleased with the results coming to them through the medium of the MANUFACTURERS' RECORD.

Basic City, Va.

Basic City, "the City of the Iron Cross," is certainly solid. Its industries now building, to say nothing of those secured and contracted for, will employ upward of 2,000 men. Arrangements for building ten miles of railroad to strike the Baltimore & Ohio at Fort Defiance have been consummated. Basic City is now called "The City of the Iron Cross," because two great trunk lines of Virginia cross here. When the Baltimore & Ohio connection shall have been constructed it will have to change its name to "The City of the Iron Star," for it will then have five diverging lines of rail. The great sale of lots occurs December 3 and 4, and the magnificent Brandon Hotel will be open to accommodate the buyers.

FIVE was lighted in the Tassie Belle furnace, a charcoal burner of 50 tons capacity, at New Birmingham, Texas, Wednesday, November 5. On Saturday, the 8th, the furnace was "blown in," and on Tuesday, the 11th, at 9.55 A. M., the first run of metal was made in the presence of many people from all the regions roundabout. The whole population is said to be much exercised over this successful venture, which, it is hoped, will call attention to the excellence of the iron ores of that district and lead to the establishment of a variety of industries for which it will supply the chief material.

BALTIMORE AND THE SOUTH.

Solid Foundations Upon Which the South's Prosperity Rests.

A luncheon was given at the Hotel Renner recently to bring together an assemblage of representative Baltimore men for the purpose of discussing Southern interests from a Baltimore standpoint, and to promote business intercourse and friendly relations. It was attended by about 150 prominent business and professional men of this city. Addresses were made by ex-Secretary of State Walker, of West Virginia, and R. H. Edmonds, editor of the MANUFACTURERS' RECORD. We have been requested by many of those present to reproduce both of these addresses, but have been unable to secure a copy of Mr. Walker's, which was a comprehensive review of West Virginia's resources. The MANUFACTURERS' RECORD hopes to reproduce this admirable paper in a later issue. Mr. Edmonds' address is given herewith:

"A nation born in a day" was scarcely more of a miracle than the creation of what is destined to be the greatest industrial empire of the world, which is now in progress before us. The immense territory which stretches from Mason and Dixon's line on the north to the Rio Grande on the south will inevitably be the richest part of America. It possesses a combination of advantages that cannot be found elsewhere in the world. In fact here are combined the chief advantages and resources of nearly all other countries without their most serious disadvantages. The late Hon. William D. Kelley, of Pennsylvania, familiarly known as 'Pig-iron' Kelley, devoted many years to a careful study of the South, and shortly before his death wrote: 'The New South is the coming El Dorado of American adventure. The States south of the Ohio and east of the Mississippi, with their half million square miles of area, contain a wealth great enough for a continent—a wealth so vast, so varied in its elements and character, so advantageously placed for development, that these States alone can sustain a population far greater than the population of the United States to-day. Their products would be so different from those of other portions of the country as to afford the most profitable exchange advantageous to all. And it is in these States that we must find the new and greater market for Northern surplus, whether that surplus be in the shape of accumulated labor of the past—that is to say, capital—or the future productions of labor, or of labor itself, because in these Southern States, more than elsewhere, the natural conditions of success exist. As to the rapidity with which it can be done, the past growth of the West furnishes the best answer. It was the building of an empire in the West that relieved and enriched the East as well as the West. The enormous energies, the "plant" used in that task, unparalleled in the magnitude of the work and the greatness of the reward to all, is now seeking a new field of investment, and there is no spot on earth sufficient for it and within its reach but the South. I do not consider that there ever existed in the West, great as its wealth is, nor in any other portion of the country, anything like the natural wealth of the South.

Equally as enthusiastic are all other experts who carefully study the South and its resources.

The South practically holds the monopoly of the world's cotton production. Its cotton crop this year, including the value of the seed, will aggregate nearly \$500,000,000, while an equal amount will be represented by its other agricultural products, or a total of \$1,000,000,000, an increase of \$400,000,000 over the value of its agricultural products in 1880. Cotton is the most remarkable agricultural staple of the world,

and its production saved the South from hopeless bankruptcy after the war. Since 1865 the South has received over \$8,000,000,000 for its cotton. Hon. Edward Atkinson once said that if New England could raise cotton it would grow rich on the seed alone. Up to five years ago the several hundred million dollars annually drawn from the North and Europe to the South to pay for cotton was immediately sent back to the North and West to pay for foodstuffs, and for every manufactured article needed in the South, from a pin to a locomotive. This is now rapidly changing. The South is largely manufacturing its own goods and raising its own foodstuffs, and thus partly retaining at home the hundreds of millions that formerly went North. It is, moreover, annually shipping North a great many millions of dollars' worth of pig iron, cotton goods, lumber, early fruits and vegetables. These advantages alone would place the South on an equality with the best of the agricultural regions of the West. But these advantages, great as they are for the creation of wealth and the development of a permanent prosperity, are only a part of the foundation on which the wonderful activity that now thrills the South is based.

Iron is emphatically king. It has been well said that the production and consumption of iron are the measure of a nation's civilization.

The starting of new towns in the South and the building of new iron works is proceeding so rapidly as to have aroused in many people a fear that the business is being overdone, and that a reaction must follow. In view of this it is important to carefully study the subject in order to understand the situation. If the development now in progress in the South is to continue for only ten years longer—though it will undoubtedly continue for an indefinite period; if there is room for new towns to be founded on a solid basis, and for the steady growth of those now claiming public attention; if the railroads of the South are to find no falling off in the clamorous demand upon them for rolling stock to move freight; if new railroads in the mineral and timber region are to be taxed from the day they open for traffic to handle the business that awaits them, and not, as in the development of the West, to wait until traffic could be created by the settlement of a farming country, then it is reasonable to suppose that more fortunes will be made in the South during the next five years than were ever made elsewhere in this country in any ten-year period. To a large extent these things must depend upon the ability of the South to continue to build iron and steel works even more rapidly during the next ten years than it is now doing, and to find a profitable market for all the iron that it can make.

The first question then that confronts us is, Will the consumption of iron and steel increase rapidly enough to justify the continued building of so many new furnaces? And second, Has the South advantages enough, in the way of ore, fuel and limestone, to enable it to produce iron at a lower cost than any other section?

On the first point it may be stated as a fact of easy demonstration that instead of there being danger of the production of iron running ahead of consumptive requirements, the real question is, How shall we build furnaces and open iron ore mines rapidly enough to meet the demand for iron? The uses for iron and steel are daily increasing. The world's advancement depends upon these metals. With the rapid march of civilization throughout the hitherto undeveloped region of the new world and of the old, with the tremendous expansion of commerce now going on, the building up of a mighty industrial empire in the South, the opening up of South America and of Africa, there is an increase in the needs

for iron and steel that is far greater than the ablest students of political economy would have dared to predict five years ago. In 1855 Hon Abram S. Hewitt, one of the foremost statesmen of America, as well as one of the largest iron and steel producers, in an elaborate paper before the English Iron and Steel Institute, stated that the ratio of increase in iron production from 1806 to 1855 indicated that by 1895 the world would produce 28,000,000 tons of iron. But Mr. Hewitt was afraid to predict that such figures would be reached. The logic of past events demonstrated their reasonableness, but in 1855 they looked so overwhelmingly large that he said they were 'so enormous as to defy any man of common sense to stand before you and say that they will be realized.' As visionary as these figures looked in 1855, it is seen that five years in advance of 1895 the world's aggregate iron production has already reached the 28,000,000 tons which Mr. Hewitt's calculation then pointed to as a possibility in 1895. At the recent meeting of the Iron and Steel Institute of England, in New York, Mr. Hewitt, after 35 years had elapsed since his former discussion of this subject, again took up the matter and demonstrated that in ten years, or by 1900, the United States alone must in all probability be making at the rate of 19,000,000 to 20,000,000 tons of pig iron a year, against 10,000,000 tons in 1890. Thus by the careful calculations of one of the most conservative of business men, and one of the largest iron producers of the country, the United States must nearly or quite double its entire iron-making capacity within ten years. Instead of 10,000,000 tons as at present, we must then be making 20,000,000 tons. This means an average annual increase of 1,000,000 tons.

Mr. Edward Atkinson, of Boston, the ablest statistician of America, if not of the world, after months of careful study and elaborate investigation, has recently written for the MANUFACTURERS' RECORD a very comprehensive review of the world's iron and steel trade. Mr. Atkinson believes that the world's consumption of iron and steel, which is now increasing so rapidly, will for the next ten years fully tax the productive powers of this and all other iron-making countries to keep up with it, and hence that while there may be fluctuations, prices throughout the world must on the whole steadily tend upwards. Basing his estimates on careful calculations made by himself, by Hon. Abram S. Hewitt and others, he holds that the present world's production of 28,000,000 net tons of pig iron, of which the United States will make during 1890 about 10,000,000 tons, must within the next ten years, or in 1890, be increased to not less than 44,000,000 tons, even at the lowest possible rate of increase, based on the rate of growth that has continued from 1856 up to the present time, while the rate of increase of late years, during which the demand for iron has so broadened, would show that the world will need and must have not less than 56,000,000 tons in 1900. These calculations are based on the normal rate of growth for the last fifty years, and do not take into consideration the possibility, and, in fact, the almost certainty, of a greatly increased demand by reason of the opening up of Africa and Asia. After showing the rate of increase in consumption from 1878 to 1889, Mr. Atkinson says: 'If the law of accelerating demand is sustained, and the supply of the year 1900 must be fifty to sixty million tons, as indicated, then the normal increase in the product of the United States must of necessity be at the average rate of about two million tons a year from the end of the year 1889 to the end of the present century.' That would mean a production of 30,000,000 tons of pig iron in the United States in 1900 against 10,000,000 this year. It is hardly possible to be-

lieve this can be done. The imagination is appalled at the magnitude of these figures, and at the tremendous activity which would be necessary to build furnaces and open mines rapidly enough to produce such a quantity. This increase, however, would only be at the same ratio as has prevailed from 1879 to 1889, and it is difficult to find any plausible excuse why the demand for iron should not increase as rapidly during the next ten years as during the last ten. But dismiss such gigantic figures as impossible of realization, and take only the normal average rate of increase for the last forty or fifty years, and the United States must still produce about what Mr. Hewitt's figures indicate, 19,000,000 to 20,000,000 tons in 1900. And it is well to remember that Mr. Hewitt's estimate made in 1855 for 1895 has been reached five years in advance of that date. If the increase in the production of iron by 1900 is to be 10,000,000 tons only, it means that at least forty new furnaces must be built every year, without counting the building of any that will be required to fill the gaps made by the abandonment of such as wear out or such as are dismantled by reason of bad location. The building of forty new furnaces every year for the next ten years would require a greater degree of activity than has yet been seen in this country.

These facts justify Mr. Atkinson's prediction 'that all the existing mines and furnaces which can be in any manner operated to advantage anywhere, either upon the European or the North American continent, will be pushed to their utmost production in order to keep pace with the increasing demand upon them, not only from the countries in which they are situated, but also from the rest of the world.' We may, therefore, dismiss the question as to whether there is any danger of overdoing the building of iron furnaces, and accept as a fact the statement that the question is really, how to build furnaces fast enough to keep up with the demand for iron; and it is upon the building of furnaces that the new towns of the South are largely based.

The great mineral belt which extends from West Virginia to Northern Alabama, covering upwards of 100,000 square miles of country in the central portion of the Southern States, east of the Mississippi river, is, so far as the variety and abundance of its natural wealth is concerned, by far the most remarkable portion of North America, if not of the world. Roughly speaking, it is 700 miles long by 150 miles wide. It can be truthfully said that this region contains fifteen times as much coal, accessible to economical mining, as can be found in any contiguous field of like area in the world, and that it contains forty times as much coal as the coal fields of England had in them before a pick had been struck in the ground. This coal field area is heavily timbered with virgin forests of the largest growth and most valuable kinds of our North American woods. This region is now acknowledged by all experts to be the richest iron ore district in the world. In addition to its vast wealth of coal and iron, it possesses the supreme advantages of having these materials in closer proximity and more easily mined than elsewhere. Instead of having to transport its ore 1,000 miles, as many Northern furnaces do, and its coke 600 to 900 miles, as Western furnaces are compelled to do, it has its ore, coal and limestone within a few miles of its furnaces. It can manufacture iron and ship it to Pennsylvania markets and still sell it at a profit for less than the actual cost of production to many furnaces in that State. But so rapidly is the demand for iron increasing that the productive capacity of Pennsylvania's furnaces, as well as of all the new furnaces which the South can build, will be taxed to keep pace with

it. Based on these facts the South can continue its present marvelous activity without any danger of overdoing the business. Wherever activity prevails there will be some speculative excitement, and in the building up of an industrial empire some may lose through unwise investments in unsound enterprises, but this should not prejudice the public against the healthy progress of the South.

Town-building has become a science. We no longer look for the struggling cross-roads village to gradually grow into a town and the town into a city. Men of keen business instincts select a site for a new town just as a financier may select a place for the establishment of a new bank. The town-site may be a wheat-field or a forest to-day, while a year hence it may be a thriving place with several thousand inhabitants, with all the advantages of schools, churches, electric lights, water works, etc. Such places can be found by the dozen all over the South. Fifteen months ago Middlesborough, Ky., was an open field, and the nearest railroad station was 25 miles away. To-day Middlesborough is the largest railroad freight depot in Kentucky except Louisville. Its population is 8,000. It has enough manufacturing enterprises under construction to employ when completed nearly 10,000 mechanics. About \$25,000,000 has already been invested in the place, mainly of English capital. This is but an example. Virginia and Alabama can show many places of almost equally as magical growth, and where the returns on investments made a year ago have proved as satisfactory as those made in Middlesborough. From Shenandoah Junction in West Virginia, where the Baltimore & Ohio crosses the Shenandoah Valley Railroad, to Birmingham, Ala., there will be five or ten years hence a dozen industrial towns for every one that now exists. The wonderful record made by the West in the building up of Denver, Omaha, St. Paul, Minneapolis, Duluth, Kansas City and other places is to be far more than duplicated in this great mineral district of the South, the richest in the world. The increase in the population of the United States during the next ten years will be about 18,000,000 or 20,000,000, or as much as the population of the entire South from Maryland to Texas at present. Instead of going to the far West as heretofore, the drift of population is now Southward. Even Dakota railroads are running 'Home-Seekers' Excursions' to the South, so great is the movement of population this way. New England is pouring its money by the millions into Southern investments, and the people of Pennsylvania are doing the same. In the last eight years the Norfolk & Western Railroad, which is a Philadelphia enterprise, has secured the investment of \$135,000,000 in cash in Virginia enterprises.

Birmingham first demonstrated that Alabama could produce pig iron and ship it to Pennsylvania and sell it at a profit at a lower price than the actual cost of production to many Pennsylvania furnaces. Birmingham blazed the pathway of industrial progress, and opened up to the South the possibility of greater prosperity than had ever been dreamed of in the past. Though this work commenced ten years ago, it is during the last five years that the greatest activity has been seen. But the record of the last decade shows with what tireless energy the South has been working. Since 1880 the South has doubled its railroad mileage, and now has 40,000 miles in operation against 20,000 ten years ago, and it is now building more new mileage than all other sections of the country combined. In these ten years it has spent upwards of \$800,000,000 in building new railroads and improving old ones. It has increased the value of its taxable property over \$1,500,000,000. In 1880 the South mined 6,000,000 tons of coal. In 1890 it will put out about 22,000,000 tons. The 390,000 tons of

pig iron produced in 1880 has grown to 2,000,000 tons this year. Its cotton mills have increased from 160 with 660,000 spindles to 355 with over 2,000,000 spindles; its cotton-seed oil mills from 40 with a capital of \$3,500,000 to 215 with a capital of \$20,000,000. In all other lines of manufacturing the same wonderful growth has marked the record of the last ten years. During the last four years the South has organized over 15,000 new manufacturing enterprises, covering every line of industry from a tack factory to steel ship-building yards. While thus developing its industrial interests the South has not neglected its agriculture. Its total grain production for 1889 was 650,000,000 bushels, against 430,000,000 bushels in 1880, a gain of 220,000,000 bushels, or a larger percentage of increase than was made by the rest of the country. In 1880 the South's live stock was worth \$390,000,000; in 1890 it is worth nearly \$600,000,000. The total value of the South's agricultural productions this year is \$1,000,000,000, against \$600,000,000 in 1880, a gain of \$400,000,000. The cotton crop of 5,700,000 bales of 1880 has risen to nearly 8,000,000 bales this year, worth, including the seed, about \$500,000,000. The number of national banks has increased from 220 with a capital of \$45,000,000 to over 500 with a capital of \$80,000,000, a more rapid percentage of gain than has been shown by the banking interests of the rest of the country.

As wonderful as has been the progress which these figures indicate, we have only seen the beginning of the South's advancement. New England has grown enormously rich through its investments in the West. It was New England capital that made possible the building up of Chicago, Kansas City and hundreds of other places. New England furnished the money for the construction of railroads to develop all parts of the West, to open mines, to build iron and steel works and to establish banks. The profits of such developments, always averaging a higher percentage than can be secured in any other line of work, have returned to enrich all New England and to make the national banking capital of Boston greater by several million dollars than that of New York. Baltimore now has a better opportunity to enrich herself than was ever presented to Boston. Instead of stretching out its financial influence to control the development of a distant region and to build railroads to open up a new country to be peopled as Boston did, it has at its very doors a country destined to be the cotton, the iron and the steel manufacturing center of America, if not of the world. It is a country of vast possibilities, where wealth will be created more rapidly than when California first turned its golden stream into the channels of the world's trade; a country where ten years hence hundreds of big towns and cities will stand where wheat or corn or cotton is growing now; a country in which every railroad is overtaxed with business, and where thousands of miles of new railway must be built; a country incomparably rich in material resources that need but the touch of capital and energy to produce an abundant harvest of wealth. Every dollar that Baltimore wisely invests in the industrial development of that section, whether it be in the building of railroads, the starting of new towns or the establishment of iron works, will not only return a large profit to enrich this city, but it will help to make Baltimore the great financial and commercial center of the whole South.

THE Western Tobacco Warehouse Association is the name adopted by the great tobacco houses of the Ohio valley for the corporation they propose to establish if all goes well. Whether this movement will succeed or fail is uncertain. The tobacco farmers of Kentucky are opposed to it, and at a recent largely-attended meeting held at Lexington last week took strong ground against it, going to the extent of threatening to combine in establishing farmers' warehouses for the marketing of their products.

SAVERNAKE.

Government Gun Works Invited There.

SAVERNAKE, VA., Nov. 17, 1890.

Editor Manufacturers' Record:

If anything was needed to tell whether the new town enterprises in Virginia were sound or not, the last week's panic has told it. Here was a score or more new towns depending upon industrial operations to support and extend them, and just in the stage where any withdrawal of confidence or of development would ruin them, when a monetary disturbance arose which has not been surpassed since 1873. The natural supposition was that the majority of the fledgling towns would be the first to feel the disaster, and property would be forced to sale. So far as can be ascertained not one instance of this character has occurred, nor has there been any disposition evinced of the kind. Application to parties furnishing machinery for new works for Southern towns produces the report that no orders have been countermanded; that Eastern men say they note no diminution in purchases. Mail applications are quite as full as for a month past. The same activity prevails as has been noted. This means, if it means anything, that the present movement in Virginia is founded on a proper basis; that it possesses and retains the confidence of capital, and that it can sustain without injury even in its infancy financial disturbances which richer and older enterprises have gone down under.

I don't know much about politics, and the older I grow the more it surprises me to find how very many people there are who resemble me in this respect. I notice, however, that when either party achieves what it calls a great victory we are always told that "in cases of this kind the people may be safely depended upon to decide which is right." Quite so. The peculiarity, however, is that this same people decides what is right in diametrically different directions about every two years, and occasionally they are to be considered a rather disappointing element to both sides. Two years ago the people "were safely depended on," and pronounced in favor of protection to American industry. Last week they were again safely depended on, and, if we are to believe the partisan press, they decided protection to American industry was a humbug and they would none of it.

With this astonishing versatility of opinion on the part of the same people, it is natural that capital should lose some little of the faith which the politician of either party so fully expresses. I notice, however, from time to time, as elections return, that no matter how the people may disappoint those who depend on them, or how much they may whiffle from one to another party, they are peculiarly apt to "vote straight" upon questions which concern their own pocket-books; hence I do not expect to see our growing Virginia industries crushed out, or the "robber tariff" which made them possible wiped out of existence. While we need it we will have it, and if Virginia is given half a chance for ten years the theorists may have their own way afterwards, for all the competition of the world cannot affect us.

I may add that there are several hundred very powerful arguments, most of which appear in your advertising pages, which, before another election, will be voting in the direction of their pocket-books, and I am induced to believe, "may be safely depended upon" to vote to keep them well lined.

A SOUTHERN GUN FOUNDRY.

With that characteristic devotion to the interests of the South which has been the marked feature of your paper from its con-

ception, and to which may be accredited your magnificent journalistic and commercial success, you urge upon your readers the desirability of making known their resources and suitability for the establishment of a national steel works and gun foundry in the South.

Answering the queries of Major Dutton as to the existence of the materials necessary for the purposes specified further on, I here claim for Virginia, and for this section of Virginia—for Buena Vista and Saverlake, in Rockbridge county, either or both, or their immediate vicinity—the proper and most emphatically suitable location for such national works.

Replying to the query, "What ores can be relied on to supply an establishment making low steel," we can furnish, first, the brown ores of this great valley, which give, under crucial sampling—an average of seventeen analyses—of metallic iron 51.411, phosphorus .222, silica 12.622, and in many cases over 55 per cent. metallic iron, .15 phosphorus and 9 per cent. silica; this from one vein which, where opened, has always been over 20 feet wide, and in several instances 50 feet, and in one notable case over 70 feet. This ore has given an average in ten years' furnace working of 53.50 per cent. metallic iron. Analysts were practically all the best-known American chemists, and notably Prof. Harden, late of Virginia Military Institute, Lexington, and A. S. McCreath, of Harrisburg, Pa. Such ores are making successfully low steel of good quality elsewhere, and soon will be here. In addition to this, within 40 miles of here on railroad are the strictly Bessemer ores of the James river valley, ranging from 57 to 68 per cent. metallic iron, from .018 to nothing phosphorus, and averaging from 8 to 10 per cent. silica. These ores are micaceous specular ores, and have been freely used for Bessemer steel. Analyses of these may be found among all the steel companies, and include such firms of analysts as Booth, Garret & Blair, Dr. F. A. Genth and I. Blodgett Brittan, of Philadelphia. Extending from a point six miles below to forty miles below Lynchburg, these ores exist in workable quantity for miles, parallel to and cut by either the Chesapeake & Ohio or Norfolk & Western Railroads, and generally within a mile of either. These ores can be more readily united to the fuels and fluxes, and are better supplied with facilities for manufacture at Buena Vista and Saverlake than anywhere else in Virginia, and for the following reasons:

1. They will be assembled on two lines of railway, practically three, the Norfolk & Western Railroad bringing to them the best coke in the world, the Pocahontas coke, and being the largest shipper of bituminous coal of any single road in the United States; also the Chesapeake & Ohio Railroad, bringing all the coals and cokes of the West Virginia coal field. Both of these railroads are in direct individual connection with deep-water, safe harbors at the seaboard, the one at Norfolk and the other at Newport News, while this locality is sufficiently removed from the coast to prevent danger from a foreign enemy in case of war. The third road, the Baltimore & Ohio, brings the coke of Connelville, thus assembling at this one point by easy distance the three great coke products of the United States.

To query 3, viz: "What source of supply of spiegeleisen or ferro-manganese will have to be relied on? Are any deposits of manganese or pyrolusite, known in your vicinity?" This is one of the strongest points of this locality. We are situated directly on and in the great manganese strike of the United States, and about the only important one. Fifty miles, roughly, from here is the Crimora manganese mine, furnishing the largest daily output of manganese of any mine in the world, and of superior quality. At 20 places, probably,

between here and Crimora, manganese, and always pyrolusite, have been opened, and generally with evidence of quantity to justify a large product if intelligently mined. At Buena Vista Dr. Ruffner reports three parallel leads of manganese, and the development insures quantity. At Saverlake the conditions and geological features as well as the topographical features are pronounced by those familiar with both to be almost identical. The analyses are precisely similar, giving about 57 per cent. metallic manganese with extremely low phosphorus—at Saverlake .067, at Crimora .070, and but very little silica or iron. At Saverlake five parallel leads of manganese have been developed, and in the opinion of some of the best experts of Great Britain and the United States, the prospect for an extensive supply is very good. At all events, it justifies the erection of a plant for handling 100 tons daily, which is now being done, and will be followed by the erection of a ferro-manganese plant here, and, it is stated, of another at Buena Vista.

To query 4, "Are materials for refractory fire-brick known?" the reply is that one fire-brick works is building at Buena Vista to produce a brick, samples of which are pronounced equal to Dinas English brick. Another, and on a large scale, is arranged for at Saverlake, and will use the same lead of fire-clay and silica for refractories.

Magnesian is also in supply as needed, and excellent fire-stones. Perhaps the point most attractive to the question at issue is the following: The government has of late taken practical steps looking to the production of nickel steel as the most desirable of the new metallic alloys. The existence of nickel in the vicinity of any future gun works or steel works is hence important. It may be and here is safely asserted that nickel ores exist in the Blue Ridge near Buena Vista and Saverlake, and, from surface indications, apparently in workable quantities. Analyses of samples of this ore from different points have given 5 per cent. and 9 per cent. of metallic nickel.

As to natural facilities for mining, delivery, timber, climate, ability to support a manufacturing population and desirability of site for the establishment of such works as here proposed, the existing conditions could scarcely fail to satisfy such intelligent investigation as a board of United States army officers would give, so nothing need be said on this head beyond urging such investigation as greatly to our national interest.

As to the question of cost of metallic production, it is to be said, first, the willingness of the government to investigate nickel-steel justifies the hope of the same investigation as to the merits of promising new steel processes, of which the air is now so full. Of one of these, now the subject of very rigid professional and commercial investigation, we are told by Mr. George I. Snelus, vice-president of the British Iron and Steel Institute, and acceptably the best authority in the world on steel production, that by this process "a ton of steel ingots can be made cheaper than a ton of Bessemer pig can be made in Pittsburgh. That means, of course, where the ore can be had at the right price." If this be true, and we cannot doubt the authority quoted, then a ton of steel ingots can be made at Buena Vista and Saverlake for less than \$12. The ores suitable for the purpose can be delivered at works for \$2 per ton and of 50 per cent. metallic iron. The ferro or spiegele, as desired, can be made here at minimum of cost, and, if made by the government, at not to exceed that of pig iron. The fuel, either coal for steam or coke for reduction, can be had at \$2 per ton, while all the other items of cost are lower than elsewhere. If the assertions I have made are correct (need I claim them to be capable of easy demonstration), this locality deserves

and should have the investigation of the board.

Should the decision be favorable, the government will have secured the proper position; should it not, private capital will in time make this the great steel-producing region, as it will be the great tin-plate region of the world.

Progress of Dallas.

[Special Cor. MANUFACTURERS' RECORD.]

DALLAS, TEXAS, November 14, 1890.

The Dallas Dressed Beef & Packing Co. steamed up and began business Thursday the 13th inst. This is a new enterprise out and out, provided with machinery for killing and storing away 250 head of hogs, 100 beeves and 200 head of sheep per day. It is the only establishment of the kind in operation in this section of the country. There is a great field here for the industry.

The Elm Street Railway Cable Co. has undergone a reorganization; the bulk of the stock has been subscribed and efforts are being made with the view, it is said, of beginning work soon.

The directors of the Cavanal Coal & Mining Co. recently met and selected Dallas as headquarters and as a general distributing depot for their product. The company has secured a lease to run 100 years on Cavanal mountain, which lies adjacent to the line of the Frisco road, 130 miles north of Red river. They have located four feet of straight coal on a slope of ten or fifteen degrees 300 feet above the road, making it easy to handle and obviating the necessity and expense of sinking shafts. The quality of the coal, it is said, averages with the best. The supply is practically unlimited, and the coal will be delivered in Dallas for much less than is paid now for the best grades. Direct railway connection is had with Dallas, which will become the coal depot of all North, West and South Texas. This is looked upon as another step in the direction of establishing large smelting works in Dallas. It is said that the Philadelphia syndicate which controls large property in North Dallas already has under serious consideration the project of merging together Llano iron ore and Indian Territory coal and erecting a large steel plant in North Dallas. In his speech during the State Exposition Governor Hubbard called attention to the fact that Pittsburgh manufacturers are shipping iron ore from Birmingham, Ala., to Pittsburgh. If that is practicable no one would question the practicability of uniting iron and coal in Dallas and manufacturing it here, especially since Llano ore is said to possess the finest steel properties of any ore in the world.

A new and extensive soap factory has recently been started in this city by Hill Bros. The various grade of laundry and toilet soaps are made. Thus one by one the numerous manufacturing enterprises in Dallas are being multiplied by the addition of others, while the city continues to grow.

THE Winston-Salem Land & Investment Co. of North Carolina, whose organization has been heretofore noted, has a capital stock of \$250,000. None of this has ever been put upon the market. The directors will soon offer \$50,000 of the treasury stock for sale, and guarantee that every dollar received from it will be spent in developing the lands owned by the company. The par value of shares is \$100. It is proposed to call in 30 per cent. at the time of subscription and 10 per cent. monthly thereafter until paid in full. This company offers free sites to manufacturers, and will give building lots to every religious denomination that within a year will put up a house of worship. A shoe factory and a cotton mill, each of large dimensions, are to be built at once. W. A. Blair, Esq., president of the People's National Bank, of Winston, N. C., will answer all inquiries.

ANNUAL MEETING OF THE STOCKHOLDERS.

road Company, is now constructing this connecting line of 73 miles. It will be in operation during the present year, and will furnish the Baltimore and Ohio Railroad Company with a shorter and better graded line to Chicago than it has heretofore possessed, greatly facilitating the handling of its increasing business to and from the Northwest.

COLUMBUS AND CINCINNATI MIDLAND RAILROAD.

The Columbus and Cincinnati Midland Railroad, extending from Columbus, Ohio, to Midland City, 45 miles east of Cincinnati, on the Baltimore and Ohio Southwestern Railroad, was, during the past year, leased by the Central Ohio Railroad Company as reorganized.

The lease has been assigned to the Baltimore and Ohio Railroad Company by the lessee, whose line is already under lease to the Baltimore and Ohio Railroad Company.

The Central Ohio Railroad Company has guaranteed the interest upon \$2,000,000 4½ per cent. bonds of the Columbus and Cincinnati Midland Railroad Company, upon \$200,000 4½ per cent. Debenture Bonds, and 3 per cent., commencing with January 1, 1895, upon \$1,000,000 of Preferred non-voting Stock.

The Baltimore and Ohio Railroad Company, in accepting the assignment of the lease, has assumed the obligations of the Central Ohio Railroad Company, and has received the entire voting capital stock of the Columbus and Cincinnati Midland Railroad Company.

The lease of this road secures to the Baltimore and Ohio Railroad Company a direct and superior line between Pittsburgh and Cincinnati and the Southwest.

CONFLUENCE AND OAKLAND RAILROAD.

The Confluence and Oakland Railroad connects with the Baltimore and Ohio at Confluence, Pennsylvania, thence extending to Young Manor, Maryland, a distance of 20 miles. The road runs through a well-timbered and fertile territory, abounding in minerals.

The Baltimore and Ohio Company has leased the Confluence and Oakland Railroad in perpetuity, paying therefor 5 per cent. on its issue of \$200,000 First Mortgage Bonds, or such thereof as may be outstanding. The above bonds will be retired by the Baltimore and Ohio Railroad Company, accepting annually \$20,000 in payment of freight accruing to it upon the interchanged traffic.

The Baltimore and Ohio Company owns a controlling interest in the stock of this Company.

MONONGAHELA RIVER RAILROAD.

The Monongahela River Railroad, referred to in last report, was opened for business on the first of August, and is doing a large traffic in coke and coal.

In pursuance of the authority given by the stockholders, the \$700,000 5 per cent. First Mortgage Bonds of the Monongahela River Railroad Company have been endorsed by the Baltimore and Ohio Railroad Company.

WEST VIRGINIA AND PITTSBURGH RAILROAD.

The stockholders of the Baltimore and Ohio Railroad Company, at a special meeting held March 31, 1890, authorized the lease of the West Virginia and Pittsburgh Railroad, and in accordance with the terms of that lease the guarantee of the interest of the First Mortgage 5 per cent. Bonds of that Company, the issue not to exceed \$4,000,000.

The line has been constructed and operated for several years as a narrow gauge road (now standard gauge) from Clarksburg, on the Parkersburg Branch of the Baltimore and Ohio Railroad, to Weston and Buckhannon, a distance of 41 miles. From these points extensions are being constructed to the waters of the Gauley River, through the center of a large undeveloped territory in West Virginia abounding in most valuable timber and in minerals, the Company owning 134,842 acres of the most valuable timber lands in the region.

The road, when completed, will be 175 miles in length, and secures to the Baltimore and Ohio Railroad Company control in the near future of a very valuable and constantly increasing traffic.

PHILADELPHIA DIVISION - NEW YORK AND WASHINGTON LINE.

The business on the Philadelphia Division continues to steadily improve.

The following is the comparison with 1889:

Gross Earnings.....	\$1,696,840 61, increase of \$335,338 76, or 24.63 per cent.
Expenses.....	1,246,606 46, " 217,576 08, " 21.14 "
Net Earnings.....	\$ 450,234 15, " 117,762 68, " 35.42 "

During the year the Baltimore and Ohio Company, with its New York connections, has placed upon the line between N. York and Washington a very superior passenger equipment, built by Pullman Company, at Pullman, Illinois, and fitted with all the most improved modern appliances, including Pullman's improved vestibule and anti-telescoping devices. The time between New York and Washington has been reduced to 5 hours.

The results of the improved service have been very gratifying.

STATEN ISLAND RAPID TRANSIT RAILROAD.

The Staten Island Rapid Transit Railroad shows the following as the results of its operations for the fiscal year ended September 30, 1890:

Gross Earnings.....	\$928,032 54	1889.	\$928,093 20
Operating Expenses.....	586,088 74		596,695 17
Net Earnings.....	\$341,943 80		\$385,998 03
Interest, Rentals and Taxes.....	346,121 49		352,468 76
Deficit.....	\$ 4,777 69	Surplus.....	\$ 32,529 27

Two large and commodious piers have been built on the Bay of New York, and much additional siding room has been provided.

Commencing with July 1, 1890, the entire freight traffic of the Baltimore and Ohio Railroad Company to and from New York has been handled by the Staten Island Rapid Transit Company in a most satisfactory manner and at greatly reduced cost.

The results of the operations of the Staten Island Rapid Transit Company for the past year have been very satisfactory in every department.

The Baltimore and Ohio Company has a large interest in this line and in its important shipping and warehouse facilities.

SALE BY THE STATE OF MARYLAND OF ITS "PREFERRED" AND BY THE CITY OF BALTIMORE OF ITS "COMMON" STOCK IN THE BALTIMORE AND OHIO RAILROAD COMPANY.

By reason of the holdings of the State of Maryland and the City of Baltimore in the Stock of the Baltimore and Ohio Company, the State appointed four and the City of Baltimore appointed seven out of the twenty-three members constituting the Board.

During the past year the City has sold its stock, and consequently withdrawn its seven directors. The State has disposed of its Preferred Stock and withdrawn two of its Directors.

The present Board consists of fourteen members, twelve of whom are elected by the Stockholders and two appointed by the State of Maryland to represent its Washington Branch Stock.

PHYSICAL CONDITION OF THE PROPERTY.

By reference to the Annual Reports of 1888 and 1889 it will be seen that the sum of \$4,607,617.62 was deducted from the Cost of Equipment and debited to "Profit and Loss." During the fiscal year of 1890 the sum of \$28,063.69 has been so deducted and charged, notwithstanding the large expenditures made during the same period in the rebuilding of cars and engines, which have greatly increased the efficiency of the equipment.

The management realizes the extreme importance of continually improving the physical condition of the property and bringing the road and its equipment up to the highest standard of efficiency. In pursuance of this policy increased expenditures have been made during the fiscal year both for Maintenance of Way and Structures and Maintenance of Equipment.

Expenditures in this connection and included in operating expenses have been made as follows:

For Maintenance of Way and Structures.....	\$3,086 361 66
Increase over 1889.....	330,615.25, or 12 per cent.
For Maintenance of Equipment.....	3,332,092 98
Increase over 1889.....	341,761.37, or 11.42 per cent.

The expanding business of the Company especially requires, for prompt and economic handling, large and additional terminal facilities at several important points.

The Locust Point yards in Baltimore, extensive as they are, have become inadequate.

To meet the demand for such facilities, the Company has now under construction (and is contemplating similar work at other places) and buildings at the following points:

At Brunswick, Maryland, the junction of the Main Line and the Metropolitan Branch, a yard containing ten miles of tracks, with the necessary freight and engine houses and other buildings.

The expenditures here during the year have been \$149,808 14.

At Cumberland, Maryland, a large yard, with engine houses, car shops and other buildings, which will transfer the handling of the business that concentrates at that point from the present crowded yard in that city.

At Benwood, West Virginia, the junction of the Trans-Ohio Division with the Main Stem, large yards, with transfer and storage tracks, engine houses, repair shops and other buildings, for the transfer of the passenger and freight traffic between the Main Line, the Wheeling and Pittsburgh Division and the Trans-Ohio Division. The expenditures here during the year have been \$58,614 72.

At Wheeling, West Virginia, improvements in the present passenger and freight station are under consideration.

At Pittsburgh, the terminus of the Pittsburgh Division, large yards and a freight house, sufficient to accommodate the increase in business at that point, which has heretofore been seriously embarrassed for want of these facilities.

At Washington, D. C., some improvements during the past year have been made in this terminal, amounting to \$20,500.80. Plans of a comprehensive character for this station are now under consideration.

All these improvements will be finished or largely advanced during the coming calendar year. They will enable the Company to handle more economically the business at these points, and will greatly add to the capacity of its equipment by reason of the prompter handling of it which their construction will enable.

As the rolling mill at Cumberland has not been in operation for a considerable time, it has been deemed wise by the Management to discontinue manufacturing at that point. The mill has therefore been leased to the Cambria Iron Company, of Johnstown, Pennsylvania, for a limited period, and is now being operated by that Company.

Attention is called to the following tables attached to this Report, which give in detail all information connected with the several subjects:

- Earnings and Expenses of all lines East and West of the Ohio River.
- Statement of Net Earnings and Income and Fixed Charges of all lines of the system, together with the profit or loss upon each, for the fiscal year.
- Statement of Income from sources other than the operation of the Railroad System.
- Statement of Interest Charges, Taxes, Rents, etc., for the fiscal year ended September 30, 1890.
- General Balance Sheet, September 30, 1890.
- Profit and Loss for the fiscal year ended September 30, 1890.
- Statement of entire Funded Debt of the Baltimore and Ohio Railroad Company's System, including that for account of the Baltimore and Ohio and Chicago Railroad Companies, the Parkersburg Branch Railroad Company, the Philadelphia Branch and the Baltimore

and Philadelphia Railroad Company; also the Funded Debt of the Pittsburgh and Connellsville Railroad Company.

H. Leases of the Company.

I. Bonds for which the Company is Guarantor.

J. Profit and Loss, Washington Branch, for the fiscal year ended September 30, 1890.

The President and Directors take great pleasure in acknowledging the specially faithful and efficient services of the officers and employees of the Company during the past year.

By order of the Board,

CHARLES F. MAYER, President.

The foregoing Report was unanimously accepted and approved.

The meeting then proceeded to the election of Directors for the ensuing year. The following gentlemen were unanimously elected to serve by a vote of 127,746 shares: For Directors—James Sloan, Jr., William F. Burns, Decatur H. Miller, William H. Blackford, Aubrey Pearre, George deB. Keim, Wesley A. Tucker, Maurice Gregg, J. Wilcox Brown, William F. Frick, Geo. A. Von Lingen, George C. Jenkins.

Messrs. George J. Appold, Samuel Stein and Thos. I. Carey acted as Judges of Election.

GENERAL NOTES.

MAGNOLIA, a health resort of Southern Mississippi, is assuming considerable importance as a trade center for the rich agricultural country surrounding it. It lies on the Illinois Central Railroad, 97 miles above New Orleans and 60 miles from the Mississippi river. It is about 520 feet above sea level. The population is about 1,000, but this is increased annually by several thousand summer residents from New Orleans and other cities. Six years ago the sole crops were cotton, corn, yams and collards, but since then numbers of experienced cultivators have settled in and around Magnolia, and diversified agriculture has been successfully established. A Swiss emigrant has established a small vineyard which has proved profitable, and is this season enlarging it, and is also planting orchards of peaches, pears and other fruits. Excellent hay is made from the native grasses, all kinds of vegetables flourish, and all American fruits except oranges, which are often cut off by winter frosts. With cheap land, fine soil and a healthy climate, Magnolia ought to flourish.

CHATTANOOGA'S Chamber of Commerce is actively preparing for celebrating the opening of the upper Tennessee to steamboat transportation. The time for the celebration has not been definitely fixed, but soon will be. At a recent meeting of the Chamber, Capt. J. F. Shipp, who accompanied Colonel Barlow, engineer in charge of the improvement, on the trial trip through the canal, gave an interesting account of it, and said: "I look upon the canal as a great success. We can say safely that, as the river now is, it is safe for boats six months in the year, and by some further improvements it will be possible for our boats the entire year."

VIRGINIA is to have her Bessemer, for a new town bearing that name has been located on James river at its confluence with Craig creek, at the junction of the Craig Valley Railroad with the James River branch of the Chesapeake & Ohio. This place is seventeen miles from Clifton Forge, seven from Daggus Springs, twenty-four from the Natural Bridge, and only half a mile from Eagle Rock, where 400 barrels of lime are made daily, and from whence the Princess furnace at Clifton Forge obtains its flux. The company organized for this development has purchased 1,850 acres of land and opened it up for settlement and for the introduction of manufacturing industries. One hotel to cost \$25,000 has been commenced, and the Bessemer Building & Loan Association will erect another at a cost of \$10,000. This company has also bought a hundred lots, and will expend \$25,000 in buildings other than the hotel. Various new industries are in contemplation, and some are already under contract. A \$3,000 depot will soon be ready for occupancy. The shops of the Craig Valley Railroad have been located here, and will employ quite a number of men. The company has determined to set apart one-half the money derived from the sale of lots to the promotion of industrial development. Bessemer relies for its future upon the minerals and timbers that abound in its vicinity, upon the richness of the agricultural lands, upon

the healthfulness and beauty of its location, and upon the strong backing it expects from the Chesapeake & Ohio Railroad people. The president of this company is L. B. Jackson, Esq., chief engineer of the Chesapeake & Ohio system. Among the directors are Col. Decatur Axtell, second vice-president of the same railroad; John Brown, president of the First National Bank of Crown Point, Ind.; Henry E. Talbott, capitalist of Dayton, Ohio; J. W. Bonsack, of Roanoke county, Va., and B. F. Eakle, Jr., of Staunton, Va. Of the capital stock of \$250,000, twenty-five per cent. was paid into the treasury within forty-eight hours after the company was organized.

SOME details of a West Virginia enterprise of more than usual magnitude, and that will open up extensive areas of virgin territory, have recently been announced. The chief organizers of this movement are Hon. S. B. Elkins and ex-Senator Henry G. Davis, of West Virginia, and Hon. James G. Blaine. These gentlemen and their associates are reported to have secured some 40,000 acres of lands rich in minerals, coal and timber, which they propose to develop by building a railroad from the present terminus of the Pennsylvania Road at Fair Chance, Pa., to Fairmont, W. Va., where it will make connection with the Baltimore & Ohio, which road it will parallel to Grafton. From thence it will run somewhat east of south to Elkton, in Randolph county, the present southern terminus of the West Virginia Central, a road owned by ex-Senators Davis and Bayard and other men of note. It is intended to continue the road from thence to some available point of junction with the Chesapeake & Ohio system in Virginia, and surveying parties now in the field will soon report which is the most practicable route. Construction will begin early next spring, and the entire line will be finished as soon thereafter as possible.

SALTVILLE, VA., has long been known to fame because of the heavy saturation of the water (pumped from underground sources) with salt, and the immense quantity of that indispensable article annually produced by its six furnaces and five hundred kettles, which are kept in operation day and night. During the war it furnished the chief salt supply of the Confederacy. Once a large Union force that was sent to destroy it was driven back with heavy loss, but later another attack was made and the works were destroyed. In time the damages were repaired under the energetic direction of Mr. George W. Palmer, and ever since there has been no cessation in the business. The land in and around Saltville is underlain with gypsum, which has furnished the foundation for a profitable industry, as great quantities of it are converted into plaster for farm use as a fertilizer. A strong company has recently been organized to control all this valuable property. Among its members are four national bank presidents, two judges, a prominent lawyer and a railroad president, who, with their associates represent New York, Southwest Virginia and Tennessee capital and enterprise. This company intends to lay off the 10,000 acres already acquired in farms, business locations and a town-site, and to build hotels, operate mills, furnaces, soda ash and other industrial works, and to change Saltville into a great manufacturing center. The property is valued at \$1,250,000.

THE
MOST INVITING FIELD IN THE SOUTH FOR
PROFITABLE INVESTMENTS.

A Charming Place of Residence. A Health-Giving Climate
Winter and Summer.

The Most Attractive Town-Site in the South. Located in a Beautiful
Valley, Surrounded by Heavily-Timbered Mountains.

UNEQUALLED IN NATURAL ADVANTAGES.

A \$1,000,000 STEEL PLANT at

TREDEGAR is now under construction. This is the
largest industrial enterprise ever estab-
lished in the South; will employ over 3,000 HANDS.
about 2,500 of them Skilled Mechanics.

THE MOST LIBERAL INDUCEMENTS FOR THE LOCATION OF
MANUFACTURES, LARGE OR SMALL.

Address for further information GOLDSMITH B. WEST, General Manager, JACKSONVILLE
MINING & MANUFACTURING Co., Tredegar (Present P. O., Jackson-
ville), Alabama.

Population 2,500.

Bank Schools, Churches, Hotel, Water
Works, Splendid Residences, Excellent Society.

Old name of town, and present name of the Postoffice, is Jacksonville, the County Seat of Calhoun,
one of the Richest Mineral and Agricultural Counties in the State.

MANY LARGE INDUSTRIES SOON TO BE LOCATED.

TREDEGAR

STEEL WORKS will include three Furnaces, Rolling Mills, &c., to produce 300 tons of Steel daily,
covering every line of manufacture from the ore to the finished Steel. The entire plant, including
furnaces, buildings machinery, &c., is under contract. Will employ 3,100 hands.

For particulars address GOLDSMITH B WEST, General Manager JACKSONVILLE MINING & MANU-
FACTURING COMPANY, Tredegar (Present Postoffice, Jacksonville), Alabama.

Alabama.

Cedar Grove Industrial Company.

Chartered Under the Laws of West Virginia.

CAPITAL - - - \$500,000.

OFFICERS:

ROBERT A. WOOLDRIDGE, PRESIDENT.
ELLIOTT BARD, TREASURER.

CHAS. C. TOMPKINS, VICE-PRESIDENT.
CHAS. H. GRASTY, SECRETARY.

DIRECTORS:

ROBERT A. WOOLDRIDGE, R. A. Wooldridge & Co., Importers and Manufacturers of Fertilizers, Baltimore.
CHAS. C. TOMPKINS, Secretary West Salem Land Co., Salem, Va.
ELLIOTT BARD, Bangs, Bard & Co., Wholesale Boots and Shoes, Baltimore.
CHAS. H. GRASTY, Manufacturers' Record, Baltimore.

WARREN C. BIRD, J. Edward Bird & Co., Wholesale and Retail Dry Goods, Baltimore.
JAMES THURSTON, Fertilizer Materials, Storage, &c., Baltimore.
GEORGE ALLEN, President West Salem Land Co., Salem, Va.
DR. JAMES BOSLEY, Physician, School Commissioner 14th Ward, Baltimore.
GEORGE W. KIRWAN, Gents' Furnishings, Baltimore.

ATTORNEYS:

WATTS & ASHBY, CHARLESTON, W. VA.

RHODES & RHODES, BALTIMORE, MD.

THIS Company holds contracts of purchase for about 165 acres of town-site property, including water front, and 1,300 acres of coal land immediately adjacent, where the present town of Cedar Grove, Kanawha County, W. Va., is now located, at the Junction of Kelley's Creek with the Kanawha River, about midway between Kanawha Falls and Charleston.

POSITION AND TRANSPORTATION.

Cedar Grove, which this company acquires, is the controlling point and sole outlet of the Kelley Creek basin, the area of which is 64 square miles. This is the backbone of the great Kanawha coal field, and is conservatively estimated to contain several billion tons of coal, all of which must be tributary to Cedar Grove, which, with its riparian rights, and the ample facilities which this company will provide, will be in a position to materialize its extraordinary natural advantages. The valley of Kelley's Creek, which extends through the back country, affords the only means of getting the coal out to transportation, owing to the mountainous country, and this company owns the level land at the mouth of the creek, where nature has made one of the few town-sites to be found on the north side of the Kanawha between the head of navigation and Charleston, the mountain sides uniformly coming down to the river and leaving scarcely enough room for a railroad track. At Cedar Grove, however, the creek has made a valley wide enough for a town of no mean proportions.

The company owns *two miles of water front*, from which the entire output of a rich area, containing many millions of dollars worth of coal, must be loaded on barges for shipment to market. This advantage alone makes the capital stock of the company seem insignificant. The question as to how our riparian rights shall be used—whether they shall be sold at from \$3,000 to \$5,000 an acre, the present market value, or held by the company and tipples and other facilities erected and operated, thus affording a large and permanent revenue, is one for the discussion and decision of the company after it is fully organized. The transportation feature is very satisfactory. Our water front is on a deep pool, between two locks in the river, thus giving ample harbor room, with all-the-year-around navigation to Cincinnati, Louisville and the Ohio and Mississippi Valley. Cedar Grove enjoys the wonderfully low rate of 2 mills per ton per mile, and the tariffs of the Chesapeake & Ohio just across the river are, it is claimed, the lowest in the United States. The Kanawha & Michigan Railroad is within a few miles of Cedar Grove, and building toward it on the north side of the river. It will thus be seen that the company will have rare transportation advantages.

TOWN-SITE.

Included in the company's property is the town-site of 165 acres of land admirably adapted for residence and business purposes. The smallness of this area compared with the site of many new towns is a decided advantage, as it compels a concentration of all business in a more limited space, and makes it impossible to have a town scattered over ten times as much ground as will be needed for years to come. On this account it greatly enhances the value of every lot on the property. There will be about 1,000 lots, which, at the very conservative estimate of \$300 each, would yield \$300,000.

COAL LANDS.

Our 1,300 acres of coal lands are estimated to contain in the several veins an aggregate of over 60,000 tons per acre. There are seven horizontal, workable veins, all of which have been worked at one or more points. The coal has an established reputation for steam and domestic uses. There is an abundance of good coking coal. All the coals are mined at a minimum of expense and under almost ideally favorable conditions. The coal property, it is believed, can easily be made to pay a good profit on the entire capital stock, as owing to its superior quality, there is a ready market for all that can be mined. One vein of this coal is preferred by large manufacturing concerns over the best grades of Pennsylvania steam coals; and another vein of this coal is pronounced by the gas works of a large Western city to be the best gas coal that they have ever used.

PRESENT IMPROVEMENTS, CLAY, STONE, &c.

The improvements on the coal property consist of a large double, two-story brick store; cost about \$6,000. From 40 to 45 miners' houses, regarded as

among the best miners' houses in the valley. The railroads, tipples, &c., are in good order. The output of one vein from May, 1888, to May, 1889, was in excess of two million bushels. On the coal property proper there is about half a mile of river front, and on the other property about a mile and a half, with two miles of railroad frontage on the Kanawha & Michigan road, which is to pass through the place.

On the mill property there is a three-story roller flour mill with a five-story elevator, recently refitted with improved machinery at a cost of about \$17,000. The mill is within 50 feet of the railroad on the one side and 150 feet of the Kanawha river on the other side. There are one good dwelling house for the miller, two good tenement houses for mill hands, a cooper shop, an inclined plane to the river, and all appurtenances for the running of a flour and grist mill.

On the coal property there are three blacksmith shops, necessary for the coal mine.

Near the drum house at the mouth of the mine is a large 30-horse power engine, with fans attached for supplying air for ventilation of the mine.

In addition to the coal on the 400 acres, bought from H. P. Tompkins, there is a large vein of white sandstone immediately on the river front, which is very valuable for building purposes, easily cut, and hardens when exposed to atmospheric influences. From actual tests made in Washington city by the government engineers, this sandstone stood a greater degree of hydraulic pressure without crushing than any sandstone that had ever been experimented upon by the government officials.

A clay for manufacturing brick found upon the bottom land is unsurpassed by any brick clay found in the Kanawha valley. The depth of this clay is as great as 20 feet, commencing within a foot and a half of the surface.

A clay found in the bottom of the Cedar Grove vein is in every respect suitable for fire-brick and tiling, it having been thoroughly tested. This is produced without cost, as in operating the mine it can be taken out without adding to the expense of operation.

Thus, the company will own at the start—of revenue-producing assets—a coal property in profitable operation, a large flour mill doing an excellent business and having an established trade, a \$6,000 brick store building and forty or fifty miners' houses in good condition. In addition to this will be the town-site of 165 acres, 50 to 100 villa lots on the hillsides, the 1,300 acres of coal land and the riparian rights of two miles of water front.

SUBSCRIPTIONS TO THE CAPITAL STOCK.

There will be \$400,000 of the capital stock available for subscription, or 40,000 shares at \$10 each. Assessments will be as follows: \$1.25 per share November 15, 1890, \$1.25 January 15, 1891, \$1.25 per share June 15. There will then be no further assessments until Nov. 1, 1891, and from that time on, it is guaranteed that should it be found necessary to make other assessments they shall not exceed 20% per annum on the stock subscribed.

The policy of the company will be to limit assessments to actual necessities in meeting deferred payments and in developing the property. It is possible that the June assessment referred to will not be called for, as the sale of lots which will take place in the spring is likely to realize sufficient money to take care of deferred payments and provide ample funds for developments. The company, however, wishes to put itself in position to carry out all its plans, regardless of the sale of lots. It is a reasonable expectation that the subscriber will never be called on to pay any assessments beyond the first three.

Subscriptions must be made in writing, must state the name and address of the subscriber, and the amount subscribed. No subscription will be accepted for more than 1,000 shares for any one subscriber. For further information call on or address

ROBERT A. WOOLDRIDGE, President,
CHAS. H. GRASTY, Secretary,
ELLIOTT BARD, Treasurer,
Or CHAS. C. TOMPKINS, Vice-President, } Baltimore.
Salem, Va.

Principal Office, - 212 BUCHANAN'S WHARF, - Baltimore, Md.

KIMBALL.

MARION COUNTY,

TENNESSEE.

KIMBALL TOWN COMPANY.

H. I. KIMBALL,
Vice-Prest. & Managing Director.
DIRECTORS.

HON. LOGAN H. ROOTS, President of First National Bank, Little Rock.
 CHARLES P. RICHARDSON, Capitalist, Chattanooga.
 J. R. STEVENS, President First National Bank, Huntsville, Ala.
 A. J. MORISON, Capitalist, London, England.
 J. H. BRYANT, President Seattle Coal & Iron Co., New York.
 GEO. COOK, President Hallet & Davis Piano Co., Boston, Mass.

HON. H. L. COCHRAN, Judge Probate Court, Fort Payne, Ala.
 H. I. KIMBALL, Atlanta, Ga.

OFFICERS.

President, HON. LOGAN H. ROOTS.
 Vice-President, C. P. RICHARDSON.
 Second Vice-President and Managing Director, H. I. KIMBALL.
 Treasurer, J. H. BRYANT.
 Assistant Treasurer, ED. E. RICHARDSON.
 Secretary W. E. DONALDSON.
 Assistant Secretary, W. BROOKS COVELL.

ATTORNEYS.

W. E. DONALDSON, Kimball.
 SHEPHERD, WATKINS & BATES, Chattanooga.

ENGINEERS.

Landscape Engineer, NATHAN G. BARRET.
 Resident Engineer, W. J. KELLY.
 Sewerage and Electrical Engineers, NIER, HARTFORD & MITCHELL.
 Hon. SAM'L H. BUCK, Gen. Superintendent.
 OFFICES.
 Richardson Building, Chattanooga.
 Union Trust Building, 80 Broadway, New York.
 Company's Building, Kimball, Tenn.

Kimball Offers

Solid, practical inducements to manufacturers. First-class enterprises under good management will be guaranteed, one-half the cash required. Local taxes will be remitted for a term of years. Lowest freights and cheapest raw materials will be secured.

Auxiliary Companies

will be organized by the parent corporation for developing the wealth of the Sequachee Valley and for supplying the city with heat, light, water, power and transportation.

A Mammoth Industrial Building

will be erected by the Kimball Town Company, which will have power, light and heat, that will be supplied to manufacturers on the most liberal terms.

Ample provision made for religious and educational institutions.

No Further Auction Sales

this year and no private sales of the corporation's lots except to those who will contract to build immediately on plans approved by the management.

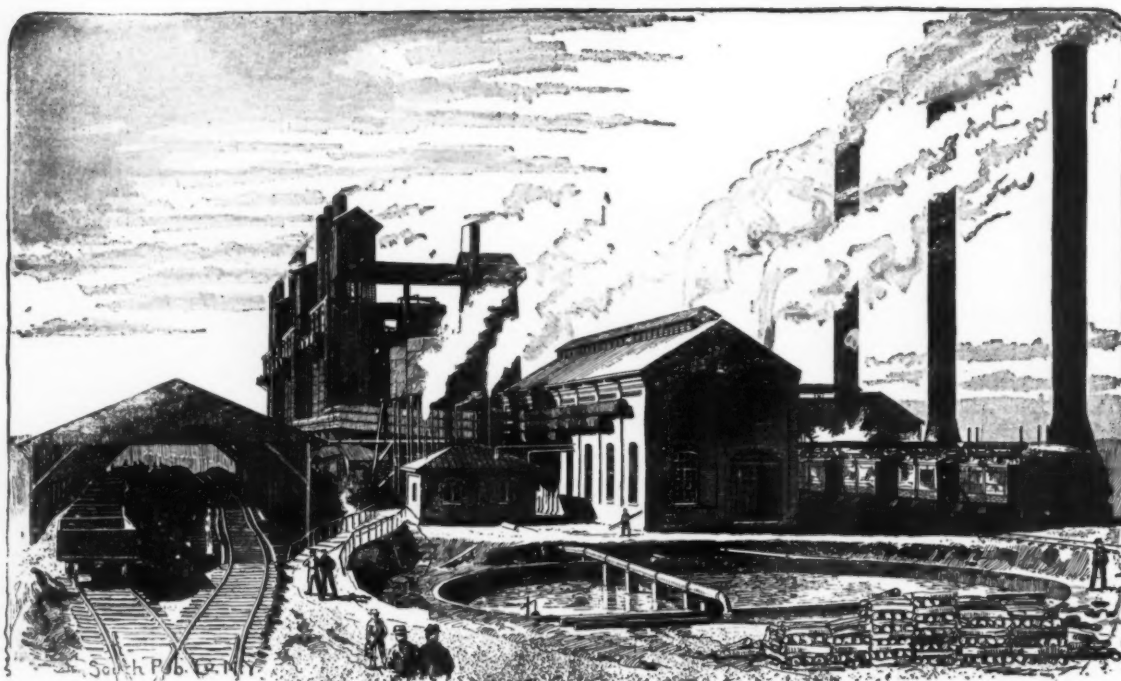
ALL CORRESPONDENCE SHOULD BE ADDRESSED TO

H. I. KIMBALL, Managing Director,

CHATTANOOGA, TENN.

SHEFFIELD, ALA.

THE SUPERB.



At the Headwaters of Deep Navigation on the Tennessee River, the Hudson of the South.

The Largest Producer of HIGH-GRADE Pig Iron of any City in the Entire Industrial South.

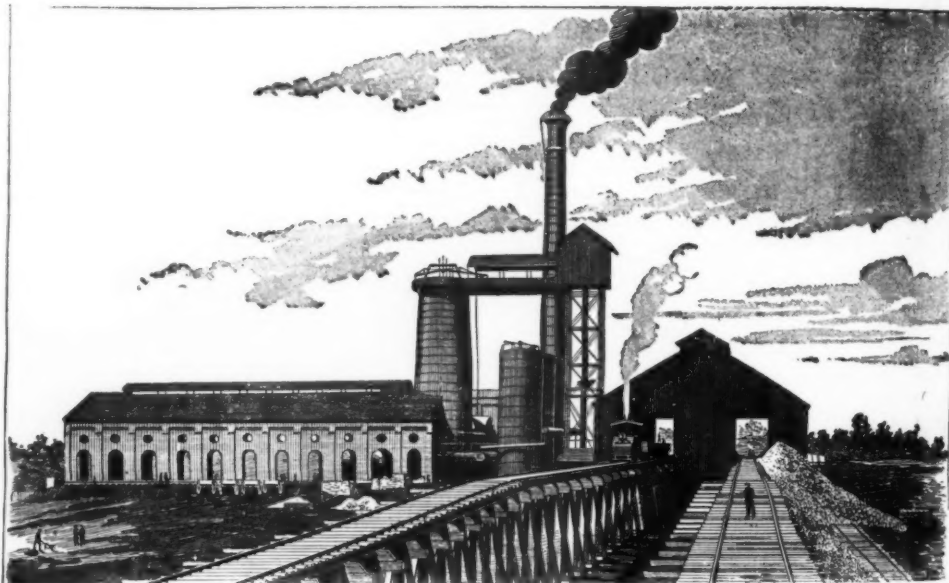
The only point in the South that has or can ship pig iron to the cities on the Mississippi, Missouri and Ohio rivers by boat or barge without rehandling. This last shipment of 5,000 tons of Pig Iron to Pittsburgh, Pa., by barge was made at a saving of \$2.65 per ton over what any iron-producing city of the South has done or can do to-day.

Five Large Blast Furnaces

Capacity 750 tons pig iron per day.

The following are among the corporate and private enterprises that belong to Sheffield:

The Sheffield Land, Iron & Coal Co., capital \$1,000,000.
 The Sheffield & Birmingham Coal, Iron & Railroad Co., capital \$1,000,000; the owners of three 150-ton blast furnaces.
 The Birm., Sheffield & Tenn. River Railway Co., capital \$5,000,000.
 The Hattie Ensley Furnace, capital \$200,000.
 The Lady Ensley Furnace Co., capital \$200,000.
 The Electric Light & Gas Fuel Works, \$50,000.
 The Sheffield Ice Co., capital \$25,000.
 The Sheffield Manufacturing & Constructing Co., \$30,000.
 The Sheffield Contracting Co., \$60,000.
 The Eureka Brick & Lumber Co., \$30,000.
 The Howard Brick Co.
 The Sheffield Bakery & Bottling Works.
 The Sheffield Mineral Paint Co., capital \$50,000.
 The Sheffield Agricultural Works, capital \$40,000.
 The Sheffield Cotton Compress Co., \$50,000.
 Millan Brothers, Steam Laundry.
 Enterprise Publishing Co.
 Water Works, already expended, \$30,000.
 Sheffield Street Railway Co., capital \$100,000.
 Cleveland Hotel Co., capital \$50,000.
 Sheffield Hotel Co., capital \$120,000.
 Bank of Commerce, capital \$150,000.
 East Sheffield Land Co., capital \$500,000.
 Hull & Keller's Fern Quarries.
 Mobile Real Estate Co., capital \$50,000.
 Sheffield Real Estate Co., capital \$50,000.
 Sheffield & Mobile Improvement Co., capital \$100,000.
 Sheffield Stove Works.
 Henderson Milling Co., capital \$100,000.
 Globe Iron & Brass Works, capital \$10,000.
 Standard Machine Shop & Foundry, capital \$50,000.
 Owen Fink Mixture Co., capital \$100,000.
 Bell Telephone & Telegraph Co.
 Foulds' Shoe Factory, capital \$20,000.
 Enterprise Wood Working Co., capital \$30,000.
 Buchanan Straw Goods Factory, \$25,000.
 The Sheffield Harness & Saddlery Co., capital \$20,000.
 Principal Shops of the Sheffield & Birmingham Railroad.
 Principal Shops Memphis & Charleston Railroad, now being built.



Aside from the foregoing the following are in course of construction and may be considered positive: Principal Shops of the Memphis & Charleston Railroad; Principal shops of the Nashville, Florence & Sheffield Division of the Louisville & Nashville Railroad. Reasonably certain to be secured in the near future are the following, in regard to which negotiations are pending: A Rolling Mill; Large Machine Shop; A Cotton Mill.

ALABAMA'S IRON CITY.

The Superb Location at the head of navigation on the Tennessee River, commanding the outlet to immense fields of IRON ORE and COAL and magnificent tracts of the finest Timber. Has already attracted to the spot where three years ago in a cotton field her projectors set the stakes of a new city, capital and people, unequaled in amount and number, circumstances considered, by any of the so-called new cities of the South.

With eight Church Organizations, two Free Public Schools, Postoffice, Telegraph and Express offices and abundant facilities of transportation by river and rail. It has every advantage as a residence city that can be desired.

Good Water; Drainage Excellent; Health and Climate Unsurpassed. Free Public Schools and Churches. Splendid opening for men of push and energy. No better point for profitable investment. No "Old Foggy" element here.

Sites for Manufacturing Enterprises

And for Free Public Schools and Churches

Donated by the Sheffield Land, Iron & Coal Company.

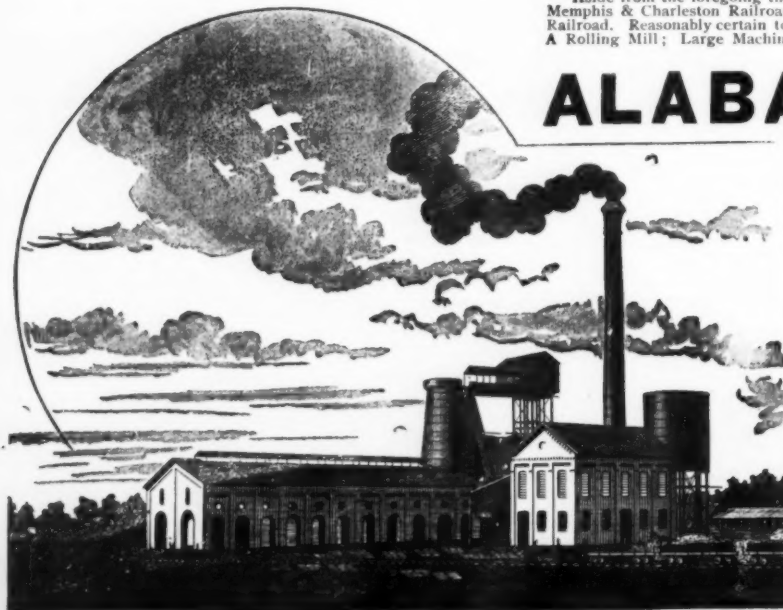
Printed information furnished on request. Correspondence solicited. Communications should be addressed

W. L. CHAMBERS,

Vice-President and Manager.

Sheffield Land, Iron & Coal Company.

SHEFFIELD, ALABAMA



LAREDO, TEXAS.

The Gateway to and from the Republic of Mexico

Is nature's grand outlet for the manufactured products of the United States and nature's grand inlet for the mineral and raw products of Mexico. For the cheap delivery of the raw material necessary for the successful operation of iron and all textile industries, Laredo holds a position unsurpassed, every material being found in the immediate neighborhood. The very foundations of the city are upon inexhaustible coal beds, now being rapidly developed. A glance at the map will show that there are no large cities within hundreds of miles of Laredo, and her favorable geographical location, being from 600 to 800 miles nearer the trade centers of both republics than any other frontier port, stamps her as the commercial entrepot between the United States and Mexico.

Laredo is becoming a most important manufacturing point,

having the following industries already located and in operation:

Woolen Mill.
Wool Scouring Mill.
Tannery.
Boot and Shoe Factory.
Ore Concentrating Works.
Ore Sampling Works.
Cotton Gin and Milling Works.
Mineral Water Bottling Works.
Four Ice Factories.
General Car and Machine Shops of the Mexican National Railroad, the largest west of the Mississippi.
Three Large Brick-yards and several smaller establishments.
A large Cotton Factory is now being erected by a New England syndicate.

Laredo Offers to the Capitalist, Merchant, Manufacturer and Mechanic Opportunities for Investment, Business or Manufacturing such as no other City in the Southwest can offer.

The city is well supplied with railroad facilities and hotel accommodations, has Holly system of water works, two electric-light companies and one of the best equipped electric motor street railways in the United States.

Population.		Imports and Exports.
1886.....	3,000	
1888.....	6,000	1888.....\$ 3,000,000
1889.....	12,000	1889..... 10,543,000

For Maps, Pamphlets, Bird's Eye Views and Reliable Information of Laredo, address

THE LAREDO IMPROVEMENT CO.

FOR SUCH INDUSTRIES AS

COTTON MILLS,
WOOLEN MILLS,
TANNERIES,
BOOT AND SHOE FACTORIES,
HARNESS AND SADDLE FACTORIES,
FURNITURE FACTORIES,
CARRIAGE AND WAGON FACTORIES,
FLOUR MILLS,
GRIST MILLS,
CRACKER FACTORIES,
CANNING FACTORIES,
COTTON-SEED OIL MILLS,

DALLAS, TEX.

Is equal to any locality
in America in its
combined advantages of

**CHEAP AND
ABUNDANT
RAW MATERIAL
READY,**

**PROFITABLE
AND EXPANDING
MARKET.**

**DISTRIBUTING FACILITIES.
ELIGIBLE SITES,
GOOD CLIMATE.**

Any worthy industries
will be aided liberally by the

DALLAS MANUFACTURERS' AID & IMPROVEMENT CO.

711 Main Street, Dallas, Texas.

THE PLACE FOR FACTORIES.

THE ROANE IRON CO.

WILL BUILD UP A

✱ **LARGE MANUFACTURING CITY** ✱

—AT—

ROCKWOOD, TENN.

AND IS PREPARED TO OFFER SUBSTANTIAL INDUCEMENTS TO MANUFACTURERS.

○—AS TO RESPONSIBILITY OF THIS COMPANY, PARTIES ARE REFERRED TO EITHER DUNN OR BRADSTREET.—○

FOR PARTICULARS ADDRESS

ROANE IRON CO., Rockwood, Tenn

LURAY, Virginia.

2,500 Acres Town Lands,

8,000 Acres Mineral Lands,

Luray Inn and Caverns.

The Valley Land & Improvement Company,

Capital Stock, \$2,000,000.

Luray, Page County, Va.

DIRECTORS.

D. F. KAGEY, Luray, Va., President.

G. C. MARSHALL, Uniontown, Pa., Vice-President and General Manager.

T. E. McCORKLE, Lexington, Va.

DR. W. L. HUDSON, Luray, Va.

G. K. MULLIN, Philadelphia, Pa.

DR. A. M. HENKEL, Staunton, Va.

J. W. MILLER, Mount Jackson, Va.

EXECUTIVE COMMITTEE.

D. F. KAGEY,

G. C. MARSHALL,

T. E. McCORKLE,

G. K. MULLIN.

Secretary, T. E. McCORKLE.

Treasurer, H. M. KERR, Kagey & Co.'s Bank.

Attorney, T. E. McCORKLE.

Associate Counsel, H. J. SMOOT,

Manager of Inn and Caverns, G. K. MULLIN.

Bankers, D. F. KAGEY & CO., Luray, Va.

CHARTER, PROPERTIES, &c.

The Valley Land & Improvement Company has been organized under the most liberal charter ever granted by the State of Virginia.

2,500 acres for manufacturing purposes and building sites. These lands are in and around the hotel, caverns and town of Luray on an undulating plateau, protected on either side by the Massanutten Mountain and the Blue Ridge Mountains.

8,000 acres of the best mineral properties in Virginia, consisting of iron, manganese and other valuable minerals which have stood the test of examination by the ablest geologists of the country.

The company owns the celebrated Luray Inn and the Luray Caverns.

Page County stands at the head of the list as having a greater variety of minerals and richer than any other county so far as known in the State.

In addition we have the finest kind and a great variety of virgin timber and fire-clays, slates, beautiful marbles, ochres, umber and mineral paints.

LOCATION, RAILROADS, &c.

Luray, now a town of about 2,500, is the county seat of Page county, has five churches, splendid schools, fine stores, three newspapers, flouring mill, cigar factory, &c.

The town is on the Shenandoah Valley Railroad, of the Norfolk & Western system, and is the best location in Virginia, four hours from tidewater.

Two new lines projected connecting closely with Baltimore and Washington and insuring cheap freights.

Luray has largest tannery in the world, annual pay roll over \$350,000.

Inexhaustible water supply, agricultural resources, charming climate.

Fine natural sites for furnaces and manufactories of all kinds fronting the railroad, reserved by the company, which by donations of land and in every possible way will promote Luray's manufacturing interests.

LOTS, CAPITAL STOCK, &c.

Capital stock \$2,000,000, shares \$100.

One million of stock reserved in treasury for betterment.

One million now offered for sale.

Books open at the bank of D. F. Kagey & Co., Luray, Va.

The company reserves the right to close the books any time before the full amount of the one million is sold.

Twenty per cent. must be paid on subscription, 20 per cent in 30 days, the balance equally in six and twelve months.

When half of the subscription is paid in subscribers have the right to use their stock in payment on lot purchases.

The company feels safe in saying that with the magnificent property in hand, the Inn and Caverns, it will be enabled when thoroughly under way to pay four or five per cent. dividend on the stock sold, independent of lots and mineral lands.

The company already owns an electric plant which will be considerably enlarged.

Complete system of water works and many other improvements projected. Investors are referred to Mr. J. W. Wheeler, Cashier Drivers and Mechanics' National Bank, Baltimore, Md., for full information. H. C. Turnbull, Jr., real estate agent, 52 Lexington street, will receive subscriptions of stock in Baltimore.

The fullest investigation invited.

THE VALLEY LAND & IMPROVEMENT COMPANY, LURAY, PAGE COUNTY, VA.

DENISON, TEXAS.

The Queen City of the Southwest

AND

GATEWAY TO THE GREAT STATE OF TEXAS.

The City of Denison Presents the Finest Opportunity of any City in the Southwest for the Investment of Capital in Large or Small Sums.

DENISON is situated in Northeastern Texas near inexhaustible beds of Coal and Iron, surrounded by the finest Fruit Lands in the world, and adjoining the INDIAN TERRITORY, which, in the nature of things, must in a few years be opened to settlement.

The city is regularly and beautifully laid out. Railroads run from it in four different directions. The Missouri, Kansas & Texas alone does an enormous business, having 54 miles of switch track in Denison, employing 500 skilled workmen and disbursing \$150,000 a month in wages.

The Houston & Texas Central Railway has its northern terminus here. The Choctaw Coal & Railway Co. have recently completed a survey of a line from Hartshorn, I. T. (a junction point with the main line of their road) to this city. The Denison, Sherman & Dallas Railway is now being constructed from here to Sherman, and four other roads have located lines to this point, with very good prospects of building.

The first public school in the State was established here, and the city's elegant two and three-story brick school buildings, surrounded by attractive grounds, are well arranged for the use of the white and colored children. Its schools are in session ten months in each year. We have sixteen church societies, seven of which are colored.

The city is well supplied with pure water from its numerous private wells—dug in the ground—and its first-class system of water works. Rate of taxation low.

The city has six miles of street railway, and a seven-mile molar railway; has an electric-light and gas company and a telephone plant. It has an influential New England colony, and counts among its citizens people from every State in the Union.

The erection of a large hotel to cost \$125,000, and a steel plant with \$2,000,000 capital is contemplated.

The population of the city by census of 1890 shows a gain of 170 per cent. in ten years.

35,000 bales of cotton were shipped from Denison in 1890, and many carloads of fruit and early vegetables are shipped annually.

The Denison Canning Co., capitalized at \$100,000, has one of the largest canning factories in the country.

The Denison Cotton Manufacturing Co.'s 25,000-spindle mill, to cost \$500,000 and to employ 650 hands, will be completed by January 1st, 1891.

The climate of Denison is magnificent, situated nearly 800 feet above sea level. In summer it is warm, but far cooler than many cities farther North, and from 6 P. M. until after sunrise it is always cool. The city is very healthy.

The capacity of the ice factory is now increased from a daily output of 30 to 50 tons.

The Denison Land & Investment Co. is prepared to give every reasonable encouragement to manufacturers, and solicit correspondence from such manufacturers as contemplate coming into the Southwest to locate.

Address all communications to

THE DENISON LAND & INVESTMENT CO.

Paid-Up Capital, \$1,200,000.

DENISON, TEXAS.

OFFICERS.

W. P. RICE, President.

MILTON H. FRENCH, Vice-President.

B. J. DERBY, General Manager.

ARTHUR L. BERRY, Secretary and Treasurer.

DIRECTORS.

W. P. RICE, Kansas City, Mo.

J. M. FORD, Kansas City, Mo.

SAM STAR, Denison, Tex.

MILTON H. FRENCH, Thomaston, Me.

JOS. B. LINCOLN, Boston, Mass.

B. J. DERBY, Burlington, Vt.

ARTHUR L. BERRY, Denison, Tex.

M. V. B. CHASE, Augusta, Me.

B. C. MURRAY, Denison, Tex.

Write to the

*The
Richest.*

*Best
Managed.*

**C
A
R
D
I
F
F**

*Greatest
Resources.*

*Unequalled
Opportunities.*

Coal & Iron Co.

CARDIFF, ROANE CO, TENN.

SAVERNAKE,

Rockbridge County,

VIRGINIA.

—* The Latest and Most Attractive Addition to Buena Vista. *

The Phenomenal Success of which New Industrial City has made Necessary Future Extensions on the same line of Valuable Minerals,

WITH UNRIVALLED FACILITIES FOR TRANSPORTATION.

SAVERNAKE adjoins Buena Vista on the southwest; fronts on Shenandoah Valley Railroad and on James River Division of the Chesapeake & Ohio Railway.

High Grade Manganese and Iron Ores to Steel and Iron Trades.

* **SAFETY AND PROFIT TO INVESTORS.** *

Healthy and Picturesque HOMES at Moderate Prices to Lot Buyers.

The Advantages of an Established City, with Churches, Schools and Factories adjoining. Employment for Mechanics and Laborers. Active Trade to the Storekeeper. Consuming Industries, with a Ready Market for product to the Manufacturer. Avenues connecting with those of Buena Vista, to Insure Convenient Access, through Street Car Lines, already Projected from that City.

SAVERNAKE

Is laid out in conveniently-sized lots to suit all in Prices and Location.

RESIDENCE LOTS. BUSINESS LOTS. MANUFACTURING SITES.

THE INDUSTRIES already secured, and which will be further announced weekly in the MANUFACTURERS' RECORD, guarantee rapid profits, free from speculative features, to all purchasers.

The LOCH LAIRD ESTATE & MINERAL CO., Limited,
LONDON, ENGLAND.

Of whose property Savernake forms a portion, having already sold a considerable number of lots to investors in London, and being in negotiation with both English and American capitalists for further sales, offer lots in Savernake to the American public, confident that their location will render values at once apparent, and guarantee every effort to sustain and foster this enterprise, both in the United States and England. Maps of Savernake and all particulars of information may be obtained upon application to

Loch Laird Estate & Mineral Co., Limited,

THOMAS DUNLAP, MANAGING DIRECTOR.

Postoffice Address—Triford, Rockbridge Co., Va.

SAVERNAKE, VIRGINIA.

Railroad Station for both Shenandoah Valley Railroad and Chesapeake & Ohio Railway, Loch Laird Station, Va.

SAVERNAKE,

Rockbridge County,

Virginia.

THE PROPERTY OF THE

Loch Laird Estate & Mineral Co., Limited,

of which Savernake is a part, is in active development, having extremely rich and valuable deposits of

MANGANESE, IRON ORE,
CEMENT ROCK, BROWN STONE, BRICK AND FIRE-CLAY,
BUILDING STONE, KAOLIN.

Arrangements have been concluded, or are in course of negotiation with the following

INDUSTRIES:

Tin-Plate Works, product 3,500 boxes I. C. Tin-Plate weekly.
Ferro-Manganese Furnace.
Ornamental Brick and Tile Works.
Slate Brick Works—patented process.
Manganese Grinding Works.
Cement Kilns and Mill.
Planing Mill and Woodworking Mill.
Iron Foundry and Machine Shop.

WITH THESE ARE PROJECTED:

An Eighty-Ton Blast Furnace.
A Coke Plant.
An Open Hearth Steel Plant, with Plate Mill and Galvanizing Works.

In addition to the foregoing, the following industries have been offered during the past week:

AN IRON BRIDGE WORKS, employing 600 hands,
LOCK FACTORY, HARDWARE FACTORY and a very large
MALLEABLE IRON WORKS from New England.

SALE OF LOTS.

The favor with which Savernake has been received has enabled the company to announce the sale to a syndicate of

SEVEN HUNDRED LOTS,

Equitably distributed throughout the town plot. These lots compose the most

Desirable Residence and Building Lots,

with superior location and magnificent views.

RESIDENCE LOTS, 50x125 feet, 50x175, 50x200 and of larger size when desired.

BUSINESS LOTS.

The map of Savernake contains

TEN BLOCKS OF BUSINESS LOTS.

Fronting on the Industrial Reservation and on Savernake, Victoria and Brudenell Avenues. Many of these have been sold, and at present prices offer a most desirable opportunity for profitable investment.

ESPECIAL RESERVATION OF LOTS FOR MECHANICS AND WORKINGMEN
desiring to build houses. Equitable prices and
easy terms of payments.

The Goshen Land & Improvement Company

OF GOSHEN, VIRGINIA.

Goshen, the Gateway connecting the Virginias.

The Coming Railroad Center.

Goshen fulfilling prophecy in becoming the Great Iron Manufacturing Center.

Surrounded by the wonderful Mineral Springs Belt, where thousands from all over the land congregate during the Summer.

Great Industries located here;

More to follow

Car Works, to manufacture Passenger, Freight and Electric Cars, are now being built.

Works covering 15 acres of ground.

Large Rolling Mill under construction.

Keystone Machine Company's building nearly completed.

Woodcock Iron Works building now under construction.

The Palace Hotel, the finest building in Virginia, under contract to be completed

July 1st, 1891.

Industries already secured and under construction guarantees the success of Goshen as a Manufacturing Center.

The Middlesborough Town Company,

ALEX. A. ARTHUR, President.

JOHN B. CARY, Sec. and Treas.

Fourteen months ago the population of the present site of Middlesborough, Ky., did not exceed 50; to-day the town has a population exceeding 6,000. It is a conservative estimate to say that in three years 50,000 people will be living here. The amount of capital now invested in the development of Middlesborough reaches

\$26,500,000.

The history of the world does not show an instance of such amazing development in so short a time and on so sure and solid and permanent a foundation.

The developments here are in the hands of English capitalists, whose purpose it is to create around Cumberland Gap the greatest coal and iron development the world has ever known.

Statement of Development to September 1, 1890.

	Number.	Value.
Business houses erected and occupied.....	83	\$ 285,000
Business houses being erected.....	41	441,500
Business houses contracted for, to be completed by Jan. 1, 1891.	31	176,500
Residences erected and occupied.....	280	417,250
Residences being erected.....	97	228,450
Residences contracted for, to be completed by January 1, 1891.	72	161,450
Industrial plants in operation.....	16	289,500
Industrial plants building.....	27	2,872,500
Industrial plants contracted for.....	14	750,000
Hotels built and occupied.....	7	132,000
Hotels being erected (including Harrogate and Cumberland Gap).....	6	850,000
Hotels contracted for.....	3	45,000
Churches completed.....	5	22,500
Churches being erected.....	3	18,000

PUBLIC BUILDINGS.

Schoolhouse.....	3,500
Public library and exhibition hall.....	25,000
City hall.....	10,000

The above statement includes only cost of construction, and does not include working capital or value of properties or stock.

BANKS.

	Capital.	Deposits.
Coal & Iron Bank.....	\$1,000,000	\$430,000
First National Bank (to be increased to \$100,000).....	50,000	160,000
People's Bank.....	500,000	120,000
Bank of Middlesborough (to be increased to \$100,000)....	50,000	60,000
Bank of Cumberland Gap.....	50,000	17,000
Bank of Claiborne.....	25,000	10,000
Total.....	\$1,675,000	\$797,000

POPULATION.

The population of Middlesborough was fifty souls in May, 1889. In August, 1890, about 6,200. Including the plants that are now completed and those that are in course of construction, which, by contract, are to be completed inside of fifteen months, Middlesborough will have a working population, composed of skilled and unskilled labor, of 7,688 men, which, according to all acknowledged rules, will give the city in eighteen months nearly 40,000 inhabitants.

NOTE.

Two years ago the nearest railroad was at Corbin, on the Louisville & Nashville System. To-day there are in Middlesborough the Louisville & Nashville, the Knoxville, Cumberland Gap & Louisville Railroads, the Belt Line and, by traffic arrangements, the Norfolk & Western and the East Tennessee, Virginia & Georgia Roads, with others building.

FOR CIRCULARS AND ALL OTHER INFORMATION ADDRESS

JOHN M. BROOKS, Resident Manager,
MIDDLESBOROUGH, KY.

Come to HAGERSTOWN,

Third Great Sale of Lots

CONDUCTED BY
J. GLENN COOK & CO.
BALTIMORE, MD.

December 9th and 10th.

THE MAGIC CITY OF MARYLAND.

Where Money Grows Rapidly. The Interstate Metropolis. Population in 1884, 5,000. Population in 1890, 11,000.

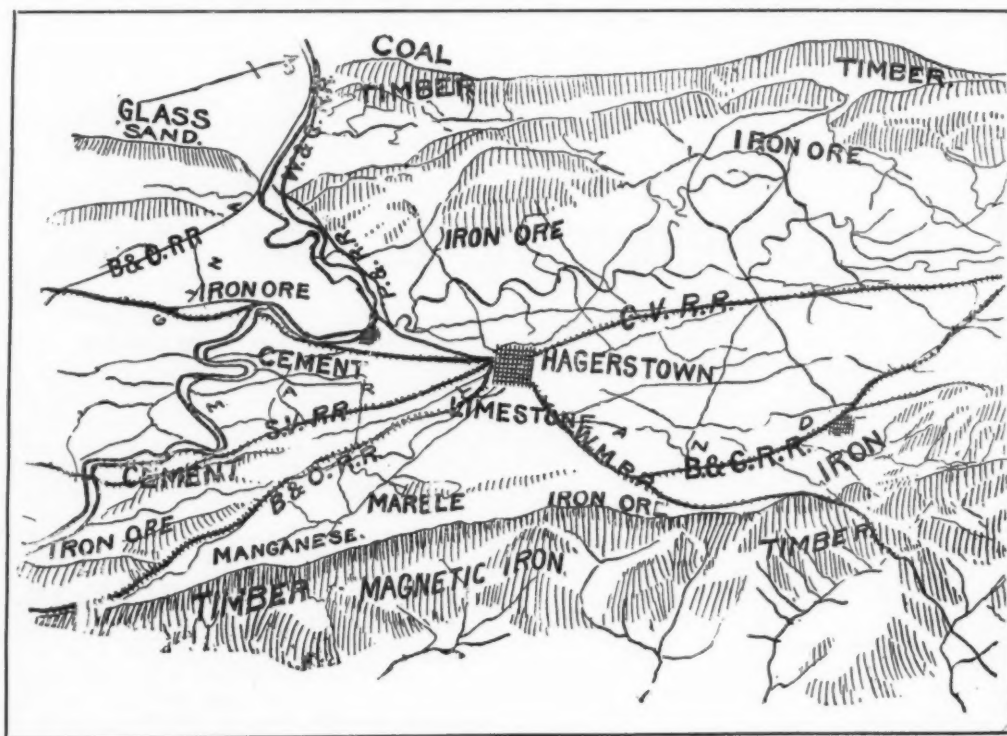
Her Growth Marvelous. Her Future Magnificent. 6 Railroads. Fifty Passenger Trains Daily (50.) Thirty-nine Mail Trains Daily (39). Unsurpassed for Manufacturing Facilities—95 already located, 6 in the last three months.

Its location commands the trade of Maryland, Virginia, West Virginia and Southern Pennsylvania. Substantial assistance given to manufacturers to locate here. Has magnificent Hotels, firm and well-graded Streets, Electric Lights, Pure Mountain Water and Free Postal Delivery.

Ores, Timber and Agricultural Products

Cheap and in the Greatest

Abundance.



Manufacturing Locations.

Every Desirable Advantage here for all who are seeking Homes, Business, or Manufacturing Locations.

This contour map shows the location and railroad facilities of Hagerstown, in the "Garden Spot" of the Cumberland Valley.

Hagerstown Manf'g., Mining & Land Improvement Co.

WASHINGTON COUNTY, MD., REAL ESTATE DEALERS,

Own and Control about 1,000 Acres of Land adjoining the City Limits.

Capital Stock,	-	-	-	-	\$1,000,000
Remaining in Treasury,	-	-	-	-	575,000

OFFICERS.

PHARES M. MISHLER, Pres't.	R. M. KEEDY, Secretary.
J. D. MAIN, Treasurer.	H. H. STRAUB, Acting Sec'y.

DIRECTORS.

CHAS. W. SEBOLD, President, and Manager of the Hagerstown Spoke and Bending Works.
S. M. SCHINDEL, President and Manager of the United Silk Mfg. Co.
PHARES M. MISHLER, President and Manager Inter-State Fencing Co.
J. HANSON BEACHLEY, Wholesale and Retail Merchant.
CORNELIUS L. KEEDY, Proprietor and President of Kee Mar College.
REUBEN M. KEEDY, formerly in the Wholesale Notion Business.
J. D. MAIN, Merchant and Secretary of the Hagerstown Hedge & Fencing Co.
ALEX. R. HAGNER, Counsellor-at-Law and Attorney for Second National Bank.

DURHAM, North Carolina,

CONSOLIDATED LAND & IMPROVEMENT CO.

CAPITAL - - - \$1,000,000.

PRESIDENT, **JULIAN S. CARR**, Prest. Blackwell Durham Tobacco Co.

VICE-PRESIDENT, **A. B. ANDREWS**, 2d Vice-Prest. Richmond & Danville Railroad.

SECRETARY AND TREASURER, **R. H. WRIGHT**.

This Company Owns 900 Acres of Land, 300 in the Business and 600 in the Residence Section of Durham. The First is Adjacent to Several of the Most Successful Manufacturing Plants.

The Residence Portion, Notable for Beauty of Situation, has been Platted to Secure the Best Effects.

NO EXPENSE will be spared by the Company in developing all this property. A standard gauge railroad, connecting with every railroad entering Durham, will pass through the center of the land designed for industries. A dummy line, under construction, will connect all the outlying lots with the center.

A Cotton Factory to employ 150 hands is to be built at once; also a Flour and Meal Mill with a capacity of 200 barrels a day.

The Company has no stock for sale. It will offer only alternate lots, reserving others for enhancement in value by development.

Enterprises of merit will be aided by donations of sites and subscriptions to capital stock.

Some of the industries already planned are:

A Knitting Factory,	Woodworking Factory,
Furniture Factory,	Bucket and Barrel Factory,
Chair Factory,	Sash, Door, Blind and Finishings Factory,
Wagon Factory,	Spoke and Handle Factory,
Buggy Factory,	Foundry and Machine Shops,
Refrigerator Factory,	Brick Works,
	Brown Stone Quarry.

In 1856 Durham was named.

Population 1865, 90 persons

Population 1890, 8,000 persons.

In 1871 the first tobacco warehouse for the sale of leaf tobacco was established.

In 1890 it has the four largest in the United States.

Taxable Values 1890, \$6,293,898.

Rate of taxation, city, county and State, 1 per cent.

In 1869 it had 6 manufactories, capital \$25,000.

In 1890 it has 23 manufactories, capital \$12,000,000; number of employees 2,000. Wages paid, 1890, \$750,000; advertising, 1890, \$100,000; paid revenue tax one year, \$827,269.54.

Durham has three Banks—capital, \$400,000.

Surplus, 49,000.

Deposits, July 1st, 1890, 623,000.

It has three newspapers, two daily and one weekly.

DURHAM HAS

WATER WORKS,

ELECTRIC-LIGHT PLANT,

TELEPHONE SYSTEM,

STREET CAR LINE,

FIRE DEPARTMENT,

TEN CHURCHES (for whites),

SCHOOLS,

TRINITY M. E. COLLEGE.

Situated in the center of Golden Belt of North Carolina, comprising counties of Durham, Orange, Person, Caswell, Alamance, Chatham, Wake and Granville.

110 miles from Lynchburg.

160 miles from Richmond.

175 miles from Norfolk.

26 miles from Raleigh.

50 miles from Sanford.

135 miles from Charlotte.

55 miles from Greensboro.

DURHAM'S RAILROADS:

RICHMOND & DANVILLE SYSTEM.

DURHAM & KEYSVILLE, giving close Richmond Connection.

DURHAM & NORTHERN to Henderson, connecting with Seaboard Air Line.

LYNCHBURG & DURHAM, crossing Atlantic & Danville, Richmond & Danville, Norfolk & Western, Chesapeake & Ohio.

L. & D., to be extended to Fayetteville and junction there with Cape Fear & Yadkin Valley.

Extension of WILMINGTON & WELDON SYSTEM, already ordered by that company from Stanhope, N. C., to Durham.

Manufacturers Desiring a Location where all the Conditions of Cheap Materials, Climate, Railroad Facilities can be had in a Well-Established, Well-Advertised, Prosperous Community, Should Address

R. H. WRIGHT, Secretary and Treasurer,

DURHAM,

Maslin's Patent Steam Pump.

Pat. Feb. 12, & Dec. 2, '79.

Cheapest and Best Automatic Steam Vacuum Pump Handling DIRTY and GRITTY LIQUIDS without Wear, Oil or Care. Simple, Economical, Efficient & Durable. Pumping Plants for Contractors, Irrigation, Water Works, Railroads, Mining & General Hydraulic Purposes. Write or call for Circulars. JOHN MASLIN & SONS, SOLE MANUFACTURERS, 165-167 1st St., Jersey City, N. J.

**COMPLETE STEAM PUMP**

10 SIZES FROM \$7 TO \$75

FOR DRIVE WELLS

AND ETC.

WRITE FOR PRICES AND

DESCRIPTIVE CIRCULARS

VANDUZEN & TIFT

SOLE MAKERS.

CINCINNATI, O.

REVERSIBLE YER'S STEEL & WOOD TRACK HAY CARRIERS

TRADE MARK. A complete outfit. Easy to put up, always reliable and fully warranted to meet the wants of any farmer.

BEST HAY TOOLS IN THE MARKET.

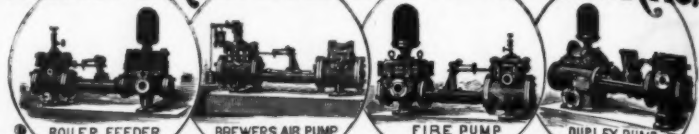
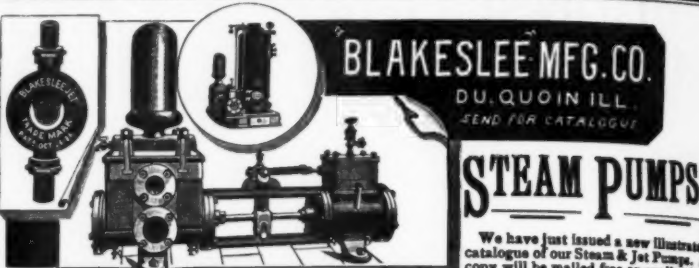
MYERS' FORCE AND LIFT PUMPS

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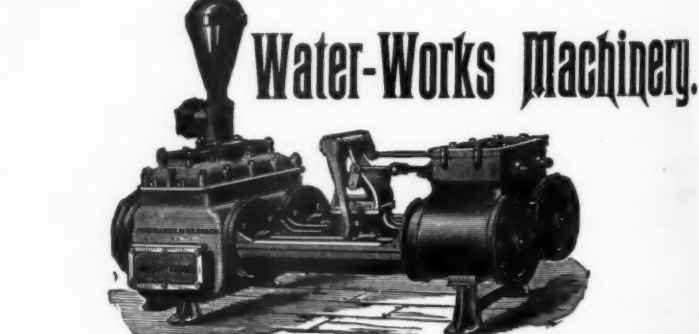
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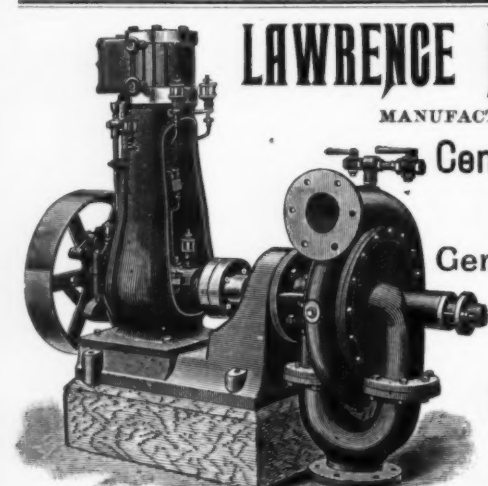
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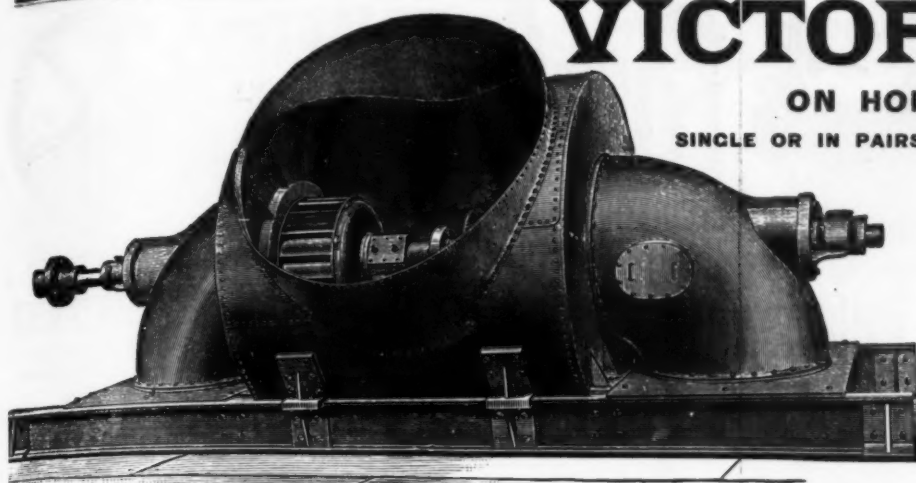
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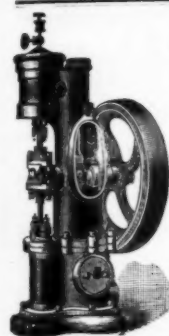
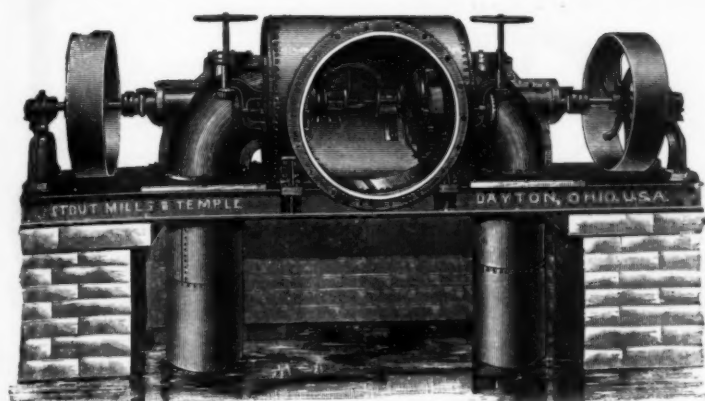
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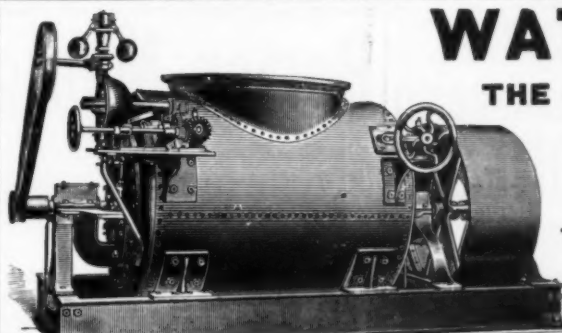
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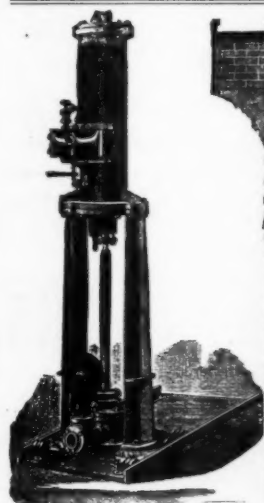
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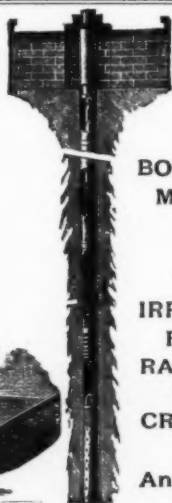
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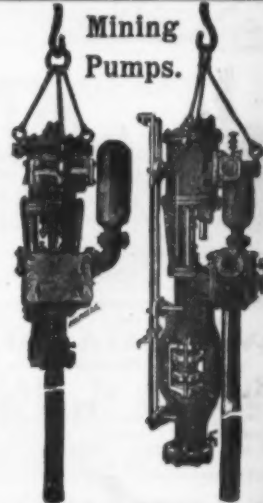
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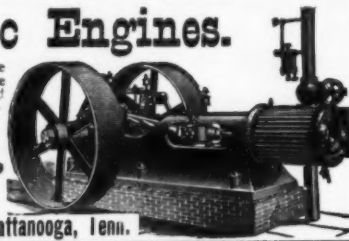
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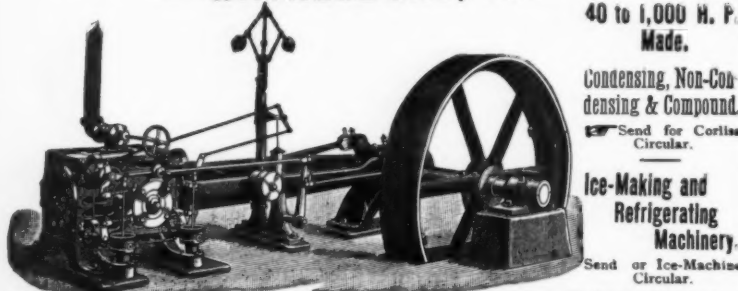
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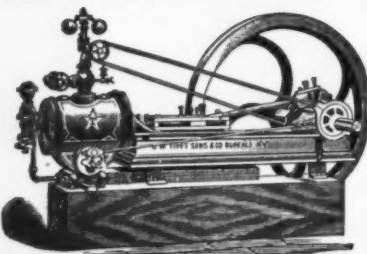
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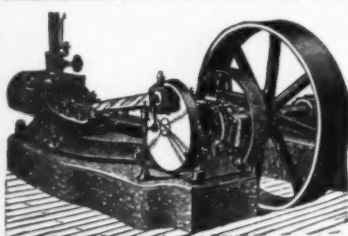
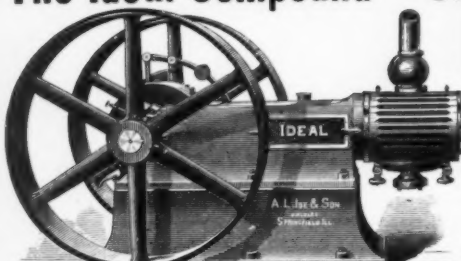


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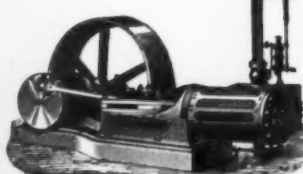
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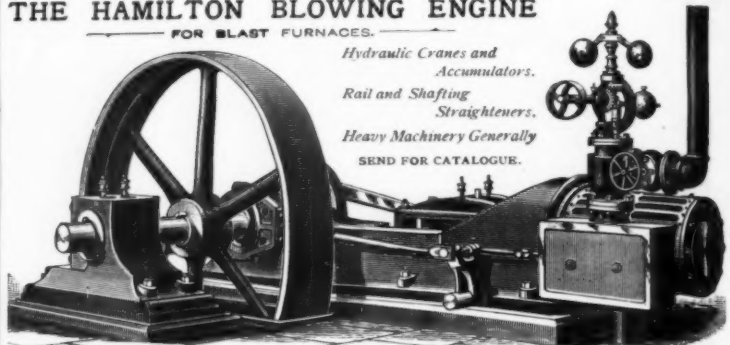
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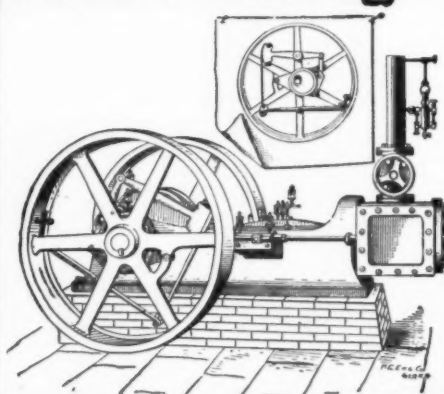


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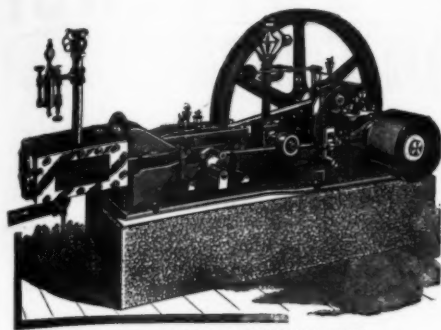
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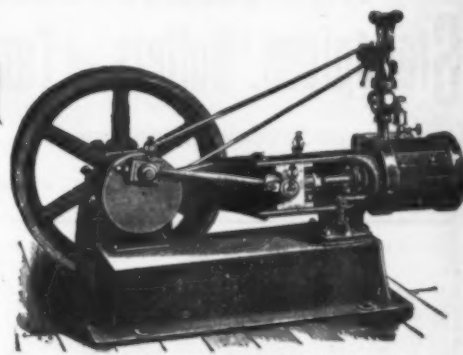


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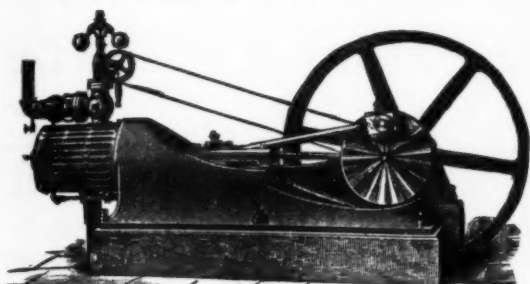
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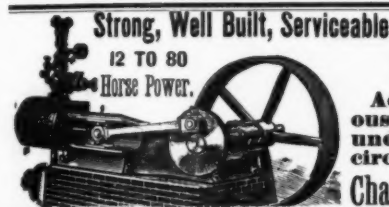
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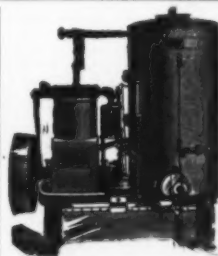
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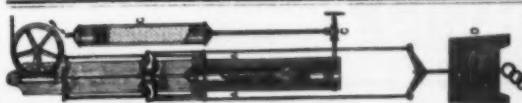
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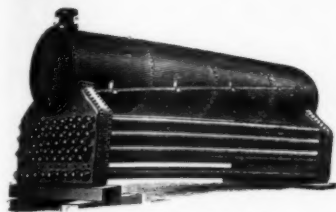
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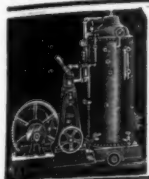
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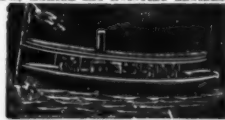
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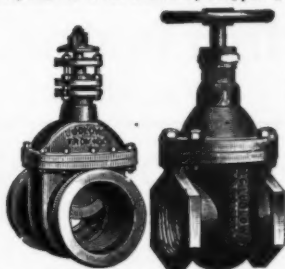


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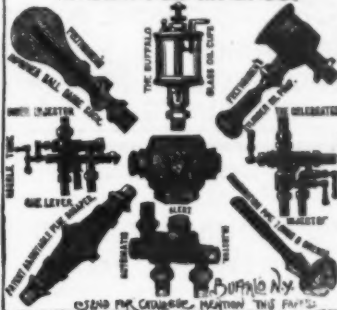
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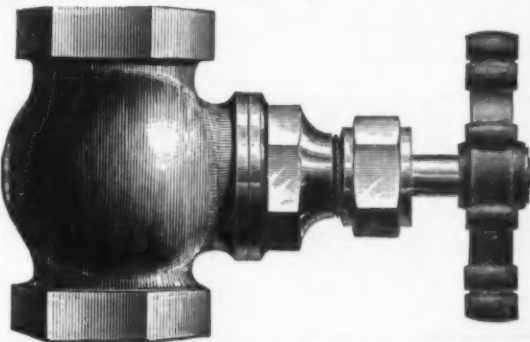
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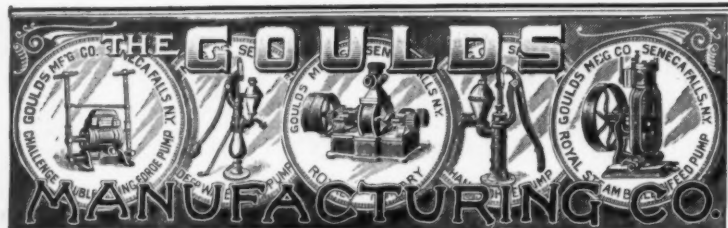
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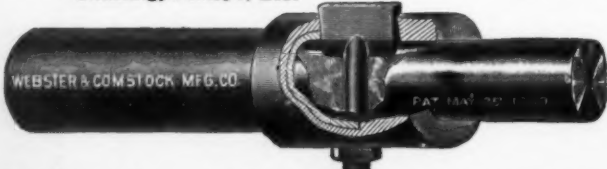
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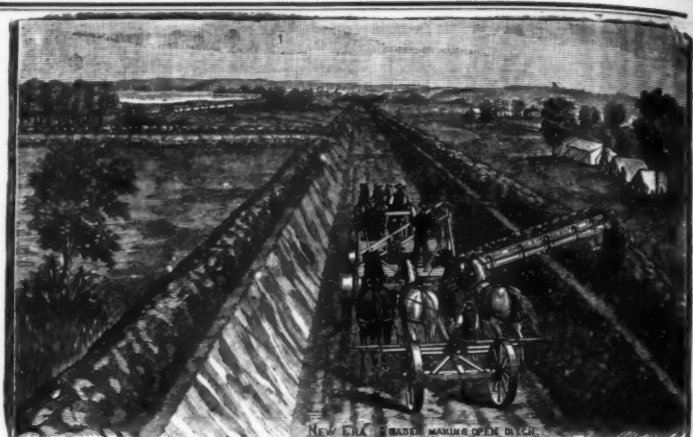
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Excavates canals at a cost of 2 cents per cubic yard, moving 1,000 to 1,500 cubic yards in 16 hours with six teams and three men. Will make a canal 80 feet wide and 8 feet deep. Builds, removes and cuts down hills by loading 600 to 800 wagons of 1 1/2 yards each in 10 hours at 2 1/2 cents each. Builds railroad embankments or country turnpikes for one-quarter the cost of any other appliance. We also make the Austin-Reversible Road Machine, Buck Scrapers, Wheel and Drag Scrapers, Contractors' Plows, and Street Sweepers. Send for catalogue.

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Railroad Construction

Americus, Ga.—Railroad.—A bill has been introduced in the legislature at Atlanta to amend the charter of the Savannah, Americus & Montgomery Railroad Co. so as to authorize the capital stock to be increased to not more than \$5,000,000.

Asheville, N. C.—Electrical Railroad.—The Asheville Loan, Construction & Improvement Co. will build from 1 to 3 miles of electrical road. It is investigating both the storage battery and trolley systems.*

Athens, Ga.—Belt Railroad.—The Athens Belt Line Railroad Co. has been chartered by J. H. Rucker, R. K. Beaver and H. H. Linton to build a railroad one mile long. The capital stock is \$15,000.

Atlanta, Ga.—Railroad.—The Atlanta & Chattahoochee River Railway Co. has been organized by C. J. Simmons, W. A. Baker and Thomas Moore to build a railroad from Atlanta to Roswell.

Atlanta, Ga.—Street Railway and Railroad.—A bill has been introduced in the legislature to charter the Atlanta & West End & West View Street Railway Co. and the Atlanta & Birmingham Railroad, previously reported.

Augusta, Ga.—Electrical Railroad.—The Augusta Railway Co. intends extending its Summerville line to Monte Sano, about ½ mile of double track, and will also build to the exposition grounds. It has ordered additional equipment.

Augusta, Ga.—Railroad.—The North Augusta Land Co. will build the North Augusta Railroad, lately mentioned.

Baltimore, Md.—Electrical Railroad.—The North Avenue Electric Railway Co. has applied to the city council for authority to extend its line to the center of city, using an elevated roadway.

Beaumont, Texas.—Electrical Railroad.—The City Street Car Co. has been granted a franchise to construct an electrical railroad. It is proposed to commence work at once.

Birmingham, Ala.—Bridge.—The North Birmingham Railroad Co. is reported as to build a bridge to cost \$20,000.

Columbia, La.—Railroad.—Henry, Forrest & Co., of St. Louis, Mo., will soon commence track-laying on their Houston Central, Arkansas & Northern Railroad contract, previously mentioned.

Danville, Va.—Railroad.—The sale of the Danville & New River Railroad to J. Wilcox Brown, agent, previously reported, has been confirmed by the United States Court. The Richmond & Danville Railroad Co. (office, Richmond) becomes the owner of the property and will, it is stated, broaden the gauge and extend it from Stuart, the present terminus, to Wilkesborough, N. C. The road has been renamed the Danville & Western Railway.

Elkins, W. Va.—Railroad.—It is stated that the West Virginia Central & Pittsburgh Railway Co. (office, Cumberland, Md.) will build a railroad from Elkins to Philippi, thence via Grafton and Fairmont to Fair Chance, Pa. The company is also reported as to continue its extension to Beverly, previously reported, southeasterly through Webster, Pocahontas, Greenbrier and Monroe counties into Virginia, to connect with the Chesapeake & Ohio Railroad at Goshen, Va.

Glasgow, Va.—Belt Railroad.—It is proposed to organize a stock company to build a belt railroad from Glasgow via Natural Bridge, Lexington and Buena Vista back to Glasgow. The distance is 30 miles. The Rockbridge Co. can give particulars if anything is done.

Greenville, Miss.—Railroad.—Surveying has been commenced on the projected Greenville, Nashville & Chattanooga Railroad, previously referred to. F. L. Bates, of Memphis, Tenn., can give particulars.

Houston, Texas.—Belt Railroad.—The Houston Belt Railroad Co. has been organized with R. H. Harrison, president; A. Mardis, vice-president, and B. F. Weems, secretary, to build a belt railroad about 15 miles long. It is intended to use 60-pound steel rails and build two bridges, one of which to be a draw. The estimated cost is \$200,000.

Jackson, Ga.—Street Railway.—The legislature has been petitioned for a charter for a street railway.

Jacksonville, Fla.—Electrical Railroad.—J. Q. Burbridge, J. M. Schumacher, F. F. L'Engle and others have organized a company, to be known as the Jacksonville Electric Railway, to build the electrical railroad previously mentioned.

Llano, Texas.—Railroad.—The proposed Waco, Lampasas & Llano Iron Route has been surveyed from Llano to Lampasas, 41 miles, and surveying between Waco and Llano is in progress. It is contemplated to build from Llano to Lampasas at an early date. C. A. Gleichrist is engineer.

Lowdesville, S. C.—Railroad.—The next legislature is to be petitioned for a charter for a company to build the railroad to connect with the Georgia, Carolina & Northern Railroad, previously mentioned.

Magnolia, Ark.—Railroad.—The Magnolia & Southern Railroad Co., lately mentioned, will build from Magnolia to State line, 25 miles, and will extend to Homer, La., at a later date.*

Memphis, Tenn.—Belt Railroad.—The Union Belt Railway Co., lately referred to, has commenced the construction of its belt railroad.

Mobile, Ala.—Railroad.—A meeting is to be held November 25 to organize a Mobile construction company to build the Mobile, Jackson & Kansas City Railroad, previously referred to.

Roanoke, Va.—Railroad.—Eliason Bros., of Washington, D. C., have contract for four miles of the Roanoke & Southern Railroad.

Thomasville, Ga.—Railroad.—The Thomasville & Southern Railroad Co. has been chartered to build a railroad from Thomasville to the Florida State line, to connect with the Tallahassee & Northern Railroad, to be built from Tallahassee, Fla., to the State line. The capital stock is \$500,000.

Wilkesboro, N. C.—Electrical Railroad.—The Winston Land & Improvement Co. contemplates building an electrical railroad.*

The Baltimore & Ohio Report.

The sixty-fourth annual report of the president and directors of the Baltimore & Ohio Railroad to the stockholders of the company was made this week. It states the condition of the company for the year that ended September 30th, and presents an array of facts and figures of the most gratifying character. There is no other branch of industry that in this day so taxes the brains and energies of its managers as the care of a great railroad system, for there enter into it a variety of problems and a diversity of interests, often in conflict, that require the utmost wisdom for their proper administration. The report shows that this extensive system has prospered under the guidance of President Charles F. Mayer, and that its condition in every respect has been greatly improved.

The comparison of earnings and expenses shown in the following table tells a significant story:

	1884.	1890.
Earnings.....	\$19,436,607	\$24,412,095
Expenses.....	11,676,377	16,966,869
Net earnings.....	\$7,760,300	\$7,445,226
Tons carried.....	8,629,048	13,988,176
Increase in gross earnings of.....	25.59 per cent.	
Increase in tons carried of.....	61.10 per cent.	
Decrease in net earnings of.....	4.66 per cent.	

During the past year this road carried 5,359,128 tons more freight than it did in the year ending September 30, 1884, and yet its net earnings were less by \$315,074 than six years ago, while the tonnage transported had greatly increased.

There is but one conclusion to be derived from this—the Baltimore & Ohio Co. has lessened rates in the interests of the public. Had it adhered to the charges of 1883, its net earnings would have been in the ratio of its increased traffic. Farmers' Alliance orators and others who denounce all railroad systems as monopolies may reconcile, if they can, these solid facts with their erroneous vagaries, but to thinking men of all callings these figures are convincing evidence that this railroad, like many others, has found it for its best interest to serve the people.

The Baltimore & Ohio is now enjoying marked prosperity, the present year showing a gratifying increase in earnings as compared with the preceding year, a substantial evidence of President Mayer's able management.

The Financial Crisis and Its Influence Upon the South.

Not in many a day has the financial world been so thoroughly startled as it was last week, when the Bank of England, all of a sudden, raised its rates of discount to an unusually high figure. It is well known that "the old lady of Threadneedle street" never does anything of this sort without good reason, and therefore banking and commercial circles were naturally filled with apprehension. In the great money centers of Europe and the United States there was a panic. Stocks fell, fell, fell. Bankers and brokers were aghast and in many instances acted like lunatics. They sold even dividend-paying securities at much less than their actual value, while speculative stocks shrank to figures that ruined many a man holding that class of securities by virtue of marginal purchases. At the beginning of this week the truth came out. The Argentine, the African, the all-over-the-world investments made by British stock speculators, had reacted upon the British money center. The revolution at Buenos Ayres had been the primary cause of the financial distress, but speculations in dubious securities in distant nations had been the row of bricks that tumbled when the Argentine brick first fell. There was but one country in the world strong enough and buoyant enough to meet and withstand the strain. There was but one nation whose financial men had sufficient confidence in it, and enough money as well, to take care of all its own securities wherever held. So American railroad and other investment securities poured like a tidal wave upon the New York stock market, and the great volume caused a tremendous depression. What was the final result? While in Great Britain the Bank of England had to fortify itself by loans from France and elsewhere, that it might uphold the credit of the ancient, strong and reputable house of Baring Brothers, and while the Rothschilds and other bankers of immense wealth joined with it in averting the financial avalanche the panic portended, the people of the United States, outside of speculative circles, were not in the least disturbed. Again, why? Because the business of this country was on a sure foundation. Because its crops of cotton, wheat, corn, tobacco and other staples were excellent. Because the railroads had all and more business than they could handle. Because the coal, iron and timbers of the South were in demand at profit paying prices. Because debts had decreased and bank accounts had increased. In fine, because the accumulated prosperity of the people of this country was beyond the power of mere speculators to destroy or even seriously to impair. The 'panic meant, in so far as the

United States was concerned, that speculators were frightened.

At this writing the panic in both Europe and New York have disappeared. Only the wrecks of it are in sight. But the people, and especially the Southern people, stand on firmer ground than ever, for they have all the elements of wealth both under and above ground. Their fertile soil and genial climate assure ever increasing crops as cultivators multiply. Their iron mines and coal fields are fast being developed. Their furnaces, foundries, factories and mills find ready and paying markets for all their products. Labor cheerfully accepts the fair wages offered, and gladly lends its aid to continued development. All these things react alike upon speculative and conservative capitalists and help to increase their confidence in the South. As a final result of the financial crisis, more money will go into Southern development in the next few years than ever before. British iron men have learned that they can transform ores into pig there cheaper than it can be done elsewhere in the world, and British capitalists have learned by sore experiences that investments in American enterprises are the only ones to be found outside of their own land that are absolutely secure. The crisis has passed, but the South is to be the greatest gainer because of it.

THE gun factory investigation board of army officers, to whose duties reference was made at length in a recent editorial, reached Birmingham, Ala., last week—Friday. A committee of the Chamber of Commerce of that city escorted them from the depot to Caldwell House, and after they were rested from their journey, they took them about the city. Friday afternoon and all day Saturday were occupied in seeing what advantages Birmingham could offer for the construction and carrying on of the proposed government gun works, after which the members of the board started for Washington. During their trip through the South they spent one day each at San Antonio, Texas, and New Orleans, La., and two at Birmingham. In answer to some leading questions, Col. William P. Craig-hill, chairman of the board, said: "We do not carry the gun factory around in our pocket and drop it where we please. We simply examine the various locations and make our report to Congress. The board has not even conferred among themselves as to what city they have agreed upon to specially recommend to Congress." Evidently this matter will be most carefully considered before any decision is reached, and up to the time that a choice has been made, there will be ample opportunities for Southern cities that were not visited to present to the board and to Congress their respective advantages. The great desideratum is the location that most nearly combines all the requirements set forth in Major Dutton's circular, of which a comprehensive synopsis was given in a former issue of the MANUFACTURERS' RECORD.

Southern Financial News.

NEW BANKS.

Albany, Ga.—A bill has been introduced in the legislature to incorporate the Bank of Albany.

Baltimore, Md.—It is contemplated to change the Franklin Bank from a State institution to a national bank with increased capital and facilities.

Barnesville, Ga.—The New South Savings Bank will, it is stated, be organized.

Cleburne, Texas.—E. Y. Brown is president, and S. E. Allen, cashier, of the Farmers & Merchants' National Bank, previously reported as organized. The capital stock is \$100,000.

Cynthiana, Ky.—It is reported that a new national bank will be organized.

Giddings, Texas.—A bank will probably be organized by Missouri capitalists.

Glasgow, Va.—W. P. Irvine and others contemplate organizing the First National Bank of Glasgow.

Itasca, Texas.—The First National Bank has been organized with a capital stock of \$50,000.

Jacksborough, Texas.—J. R. Hoxie, of Fort Worth, has applied for authority to organize the First National Bank of Jacksborough.

Jackson, Ky.—The Breathitt County Citizens' Bank is being organized.

Monticello, Fla.—The Jefferson County State Bank has been organized with T. P. Denham, president, and B. F. Smith, cashier. The capital stock is \$50,000.

Mount Airy, N. C.—It is proposed to reorganize the Planters' Bank as a national bank with a capital stock of \$100,000.

New Albany, Miss.—The Union County Bank has commenced business. The capital stock is \$25,000.

Obion, Tenn.—The Bank of Obion has been chartered.

Piedmont, Ala.—The Bank of Piedmont is to be reorganized as the First National Bank of Piedmont with a capital stock of \$100,000.

Tallapoosa, Ga.—A bill has been introduced in the legislature to incorporate the Merchants & Miners' Bank.

Washington, D. C.—The Ohio National Bank, previously reported, will be organized with a capital stock of \$300,000. Hon. J. D. Taylor, of Cambridge, Ohio, can give particulars.

Zebulon, Ga.—The establishment of a bank is talked of.

Austin, Texas.—The State has purchased \$1,000,000 of its own 7 per cent. bonds, held by Eastern parties.

Baltimore, Md.—The First National Bank has declared a semi-annual dividend of 3 per cent.; Old Town Insurance Co., a dividend of 2½ per cent., and the Second National Bank, a semi-annual dividend of 4 per cent.

Charleston, S. C.—The conditions of the sale of the Blackville, Alston & Newberry Railroad to the East Shore Terminal Co. include, it is stated, the guarantee of the payment of \$150,000 6 per cent. first mortgage bonds and the issuance of \$130,000 of 5 per cent. second mortgage bonds.

Fort Worth, Texas.—J. P. Smith, mayor, recommends to the city council the issuance of \$125,000 20-year 5 per cent. bonds for building a city hall.

Hendersonville, N. C., has issued \$15,000 of 6 per cent. bonds, interest payable semi-annually.

for improvement purposes. V. L. Hyman, mayor, can give particulars.

New England, Ga.—The New England Land, Coal, Iron & Railway Co. is reported as to issue \$200,000 of bonds for developing and improving its property.

Tallapoosa, Ga.—A bill has been introduced in the Georgia legislature authorizing the issuance of \$10,000 of bonds for school purposes.

Inman Admits Gould's Control of Richmond Terminal.

Wednesday's Financial News says: "President John H. Inman, of the Richmond Terminal Co., was quoted yesterday as saying that Jay Gould had acquired control of the stock of the Richmond Terminal Co. He said that there are 700,000 shares of the stock, and that Mr. Gould had bought up 100,000 shares. On such a holding Mr. Gould would be entitled to three or four members out of the 18 in the board of directors at the next election. Mr. Gould and Mr. Geo. J. Gould, he said were first-class railroad men and would be welcomed in the board. The Richmond Terminal Co. has two direct connections with the Missouri Pacific, one at Memphis, Tenn., and one at Greenville, Miss. The combination of these interests ought to be of material advantage."

NOTICE

The town of Hendersonville, N. C., has issued

\$15,000.00

In Bonds for Sewerage, Water Works, &c.

These bonds are now for sale. They bear 6 per cent. interest, and the interest is payable semi-annually. The bonds are well secured, and offer a fine investment for someone. For further information apply to V. L. Hyman, mayor, or W. A. Hood, secretary.

V. L. HYMAN, Mayor.

Richmond Stock Exchange Quotations.

Reported by JOHN L. WILLIAMS & SON, Bankers, Richmond.

RICHMOND, VA., November 18, 1890.

	BID.	ASKED.
North Carolina 4's, 1910.....	98	100
North Carolina 6's, 1919.....	122	..
Virginia New 3's, 1932.....	65	66
Danville 5's.....	100	103
Lynchburg, Va., 5's, 1915.....	103	..
Petersburg, Va., 5's, 1915.....	104	..
Norfolk, Va., 5's, 1911.....	106	..
Richmond, Va., 5's, 1922.....	108	112
Atlanta & Charlotte Ry., 1st 7's, 1907.....	120	122½
Atlanta & Charlotte Gt'd 6's, 1900.....	103	104
Char., Col. & Aug. R.R. Gen. 6's, 1932.....	109	110½
Georgia Pacific Ry. 1st 6's, 1922.....	110½	111½
Georgia Pacific 2d 5's, 1923.....	73	74
Pa. Pacific Income, 5's.....	19	22
Petersburg Railroad Class A 5's, 1926.....	104	106
Petersburg Railroad Class B 6's, 1926.....	105	107½
Rich. & Danville R. R. Gold 6's, 1915.....	116	..
West. N. Car. R. R. Gt'd 6's, 1914.....	101	..
Northwestern N. Car. R. R. 1st 6's.....	100	..
Atlanta & Charlotte R. R. Stock.....	97	99
North Carolina Railroad Stock.....	103	..
R. F. & Pot. R.R. Div'd Obligations.....	112	114½
Virginia Midland Railway Stock.....	..	..
Sloss Iron & Steel Co. Stock.....	..	..
Sloss Iron & Steel Co. 1st 6's.....	92	..
Sloss Iron & Steel Co. 2d 6's.....	65	..

	Number of lots given with each 10 sh'rs stock.	When organized.	Capital stock.	Author. Paid up.	Par value.	Bid.	Asked
BASIC CITY.							
Basic City M'n'g. Mfg. & Land Co.....	..	Dec. 7, '89	\$700,000	50%	100	50	55
BRISTOL.							
Southwest Bristol Land Co.....	..	Aug. '90	300,000	\$150,000	100	..	..
Pioneer Land Co.....	..	June, '90	500,000	..	100	..	..
Richmond & Bristol Land Co.....	..	June, '90	220,000	..	20	..	..
Commonwealth Land Co.....	..	June, '90	104,000	60,000	20	..	..
BUCHANAN.							
Central Land Co.....	..	Apr'l 12, '90	1,500,000	750,000	100	73	..
BUENA VISTA.							
Buena Vista Co.....	5	Feb. 14, '89	800,000	50%	100	73	80
Buena Vista Improvement Co.....	..	Jan., 1889	50,000	full paid	100	124	140
CLIFTON FORGE.							
C. & O. Development Co.....	4	April, '90	300,000	..	100	..	75
Clifton Forge Mfg. & Devel. Co.....	5	Aug. 18, '90	200,000	..	100	..	120
Clifton Forge Co.....	5	May, 1890	400,000	..	100	..	..
CHARLOTTESVILLE.							
Charlottesville Ind. & Land Imp. Co.....	2½	April, '89	50,000	..	50	50	53
Belmont Land Co.....	10	July 15, '89	100,000	..	100	105	125
Charlottesville Development Co.....	None	Aug. 1, '89	40,000	..	50	..	..
West End Land Co.....	2½	April 16, '89	40,000	..	50	..	52
Jefferson Park Improvement Co.....	None	Aug. 15, '89	150,000	..	50	..	..
GLASGOW.							
Rockbridge Co.....	5	Sept., '89	5,000,000	475,000	100	112½	115
West End Glasgow Land Co.....	None	March, '90	..	105,000	..	125	..
HARRISONBURG.							
Harrisonburg Land & Imp. Co.....	..	May 22, '90	150,000	..	100	..	130
LYNCHBURG.							
West Lynchburg Land Co.....	..	..	1,000,000	45%	100	..	..
Rivermont Co.....	..	..	1,500,000	40%	10	..	2
South Lynchburg Land Co.....	..	..	..	60%	100	..	..
Park Avenue Land Co.....	..	..	100,000	50%	100	..	..
PETERSBURG.							
West End Land & Improvement Co.....	..	June 15, '90	25,000	50%	63	100	..
Virginia Immigration L'd & Imp. Co.....	..	July 10, '90	50,000	100	..	121	..
PULASKI.							
Pulaski Development Co.....	..	March, '90	500,000	300,000	..	40	..
STAUNTON.							
Staunton Development Co.....	5	April, '90	3,000,000	..	100	..	100

* Stock declared full paid.

* 5 per cent. dividend declared October, 1889.

* 10 per cent. dividend declared, payable January 1, 1891.

** \$24,000 held in treasury.

* When 50 per cent. has been paid in the stock will be declared full paid. The company receives the stock at \$75 in payment and 4th payments for lots purchased of them.

† Stock taken at \$150 in part payment for lots.

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OF BALTIMORE.

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Banks, Bankers, Corporations and In-
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on Great Britain and Ireland, France, Germany,
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country, Canada, Mexico, the West Indies and
South America.

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of Money.

Drafts Collected in all parts of the World.

BROWN, SHIPLEY & CO., LONDON.

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Barrow, Wade, Guthrie & Co., of London,
Manchester and New York, upon auditing
the accounts of the Company as published
June 30th, 1890, appended thereto the fol-
lowing certificate:

Having examined the books of the Equitable
Mortgage Company, we hereby certify that the
foregoing accounts and statement are in con-
formity therewith, and we believe that the
accounts fully and fairly represent the position of
the Company as on the 30th June, 1890.

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office of the Supervising Architect, Treasury
Department, Washington, D. C., until 2 o'clock
P. M. on the 10th day of December, 1890, for all
the labor and material required for the ap-
proaches to the U. S. Courthouse, Postoffice and
Customhouse at Vicksburg, Miss., in accordance
with the drawing and specification, copies of
which may be had on application at this office or
the office of the Superintendent at Vicksburg,
Miss. Each bid must be accompanied by a cer-
tified check for \$100. The Department will reject
all bids received after the time herein stated for
opening the same, also all bids which do not
comply strictly with all the requirements of this
invitation. Proposals must be enclosed in en-
velopes, sealed and marked "Proposal for the ap-
proaches to the U. S. Courthouse, Postoffice and
Customhouse at Vicksburg, Miss.," and addressed to
JAS. H. WINDRIM, Supervising Architect.
November 15, 1890.

SEALED PROPOSALS will be received at the
office of the Supervising Architect, Treasury
Department, Washington, D. C., until 2 o'clock
P. M. on the 9th day of December, 1890, for all
the labor and material and fixing in place com-
plete the low-pressure, return-circulation, steam-
heating and ventilating apparatus for the United
States courthouse, postoffice, &c., building at
Augusta, Ga., in accordance with the drawing
and specification, copies of which may be had on
application at this office or the office of the su-
perintendent at Augusta, Ga. Each bid must be ac-
companied by a certified check for \$100. The
department will reject all bids received after the
time herein stated for opening the same, also bids
which do not comply strictly with all the require-
ments of this invitation. Proposals must be en-
closed in envelopes, sealed and marked "Pro-
posal for the Low-pressure, Return-circulation,
Steam-heating and Ventilating Apparatus for the
U. S. Courthouse, Postoffice, &c., Building at
Augusta, Ga.," and addressed to JAS. H. WIN-
DRIM, Supervising Architect. November 17, 1890.

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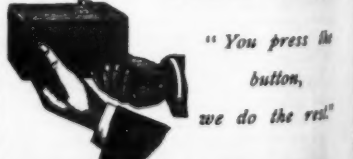
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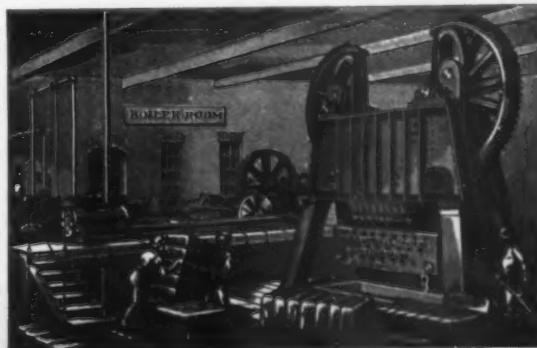
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CINCINNATI, O.

CONSTRUCTION DEPARTMENT.

NOTWITHSTANDING the excitement in the great financial centers of the world, there has been no halting in the South's industrial progress. It is already being demonstrated that capitalists driven from Wall Street stock speculations by such troubles as we have been passing through, are turning their attention to the South, where investments are safer and where the profits are greater. The South moves along as though there had been no sign of financial trouble anywhere. This is very strikingly shown in the record of new enterprises reported during the week. A \$1,000,000 company has been organized to build a cotton mill at Huntsville; a \$500,000 mill will be built in Union county, S. C.; a large mill is to be moved to Alabama from Delaware, and a \$100,000 mill in Mississippi has been sold and will be enlarged to a \$1,000,000 plant; Nashville, Tenn., has organized a \$1,000,000 stock-yards and packing company; Glasgow, Va., a \$500,000 steel car building company; Beaumont, Texas, a \$500,000 car company; Bedford City, Va., secures the removal of a \$200,000 engine works from Pennsylvania; a \$2,000,000 company is building a 7,000 horsepower canal in North Carolina for furnishing power to many new enterprises; Dalton, Ga., has organized a \$200,000 quarrying company; Grottoes, Va., a \$50,000 plumbers' supply company; Tyler, Texas, a \$50,000 lumber company; Murphy, N. C., a \$500,000 improvement company; Newport News, Va., a \$2,000,000 improvement company; Buena Vista, Va., a \$500,000 company; Louisville, Ky., a \$100,000 lumber company; Pensacola, Fla., a \$50,000 manufacturing company; Norfolk, Va., is to have \$200,000 car works; 40,000 acres of coal land in West Virginia will be developed by Northern capitalists.

These are but illustrations of what the South has done during the past week. Not a complaint has been heard of any bad influence from the Wall Street troubles, but on the contrary, it is everywhere recognized that the South is on a solid substantial basis that insures rapid growth regardless of financial difficulties elsewhere.

*Means machinery is wanted, particulars of which will be found in "Machinery Wanted" columns.

In correspondence relating to matters reported in this paper, it will be a favor if it is stated that the information was gained from the MANUFACTURERS' RECORD.

ALABAMA.

Attalla—Repair Shops.—The Alabama Great Southern Railroad Co. (office, Birmingham) is reported as to build repair shops at Attalla.

Batesville—Machine Shops.—The Batesville Iron Works will, it is stated, add an iron foundry to its machine shops.

Bessemer—Ice Factory.—The Bessemer Ice Manufacturing & Cold Storage Co., lately mentioned, will put in additional machinery.

Birmingham—Iron Works.—The Alabama Iron Works has recently put additional machinery in its plant, as reported in last issue.

Birmingham—Cotton Gin Works.—The Smith Sons & Co. Cotton Gin Works is reported as to enlarge its plant.

Henryellen—Coal Mines.—The De Bardeleben Coal & Iron Co. will, it is reported, largely increase the output of its Henryellen coal mines.

Huntsville—Axe-handle Factory.—The Iowa parties lately mentioned as to establish an axe-handle factory in Huntsville are reported as also to manufacture plow stocks and handles.

Mobile—Baking Powder Factory.—Paulin & Warley have organized the Eagle Baking Powder Co. and started a baking powder factory, as lately reported.*

Mobile—Ice Factory.—The Central Ice Co., recently mentioned, will add a 30-ton absorption ice machine to its plant.

Mobile—Ramie Factory.—S. H. Slaughter, of California, is reported as to erect a factory for the manufacture of ramie cloth in Mobile.

Montgomery—Cleaning and Dyeing Works.—F. R. Hurlburt, of Birmingham, will establish, it is reported, branch cleaning and dyeing works in Montgomery.

Pell City—Brass Foundry and Pipe Works.—Pipe works and a brass foundry will be erected by the Pike Manufacturing Co., lately mentioned.

Piedmont—Knitting Mill.—A stock company is reported as having been organized to erect a knitting mill. The Piedmont Land & Improvement Co. can give information.

Piedmont—Carriage-wheel Factory.—Willett & Addison, of Delaware, are investigating with a view of establishing a carriage wheel factory in Piedmont.

Piedmont—Lumber Mill, etc.—It is stated that the Piedmont Lumber Co. and McPherson & Co. have consolidated and will organize the Piedmont Lumber Co. with a capital stock of \$25,000 to operate lumber mills, etc. W. M. Elgin will be president, and I. N. Cochran, secretary.

Piedmont—Cotton Factory and Electric-light Plant.—It is stated that the Barlow & Thatcher Spinning Co., of Wilmington, Del., will erect a cotton factory in Piedmont. The factory will be 106x144 feet, and an electric-light plant is to be put in same.

Riverton—Grain Elevator.—J. A. Foote, of Iuka, Miss., has organized, it is stated, a stock company for the purpose of erecting a grain and feed elevator in Riverton.

Round Mountain—Coal Mines.—G. W. Ware, of Chattanooga, Tenn., is reported as opening coal mines.

Sheffield—Woodworking Factory.—The Enterprise Woodworking Co. has put additional machinery in its woodworking factory, as reported last week.

Shelby—Water Works.—The Shelby Manufacturing & Improvement Co. is reported as constructing the water works previously mentioned.

Tredegar (P. O. at Jacksonville)—Laundry.—J. W. Burke is organizing a \$3,000 stock company to establish the steam laundry lately mentioned.*

Tuscumbia—Plow Factory.—T. T. Roland & Son are reported as erecting a plow factory.

ARKANSAS.

Argenta—Electric-light Plant.—The Elite Furniture & Lumber Co. will, it is reported, put an electric-light plant in its lumber mill and furniture factory.

Batesville—Electric-light Plant and Water Works.—It is stated that franchise has been granted for the erection of an electric-light plant and the construction of water works.

Dardanelle—Pontoon Bridge.—The Dardanelle Pontoon Bridge & Turnpike Co. has been incorporated with Preston Roberts, Sr., president, for the purpose of building the pontoon bridge over the Arkansas river at Dardanelle, previously mentioned, and constructing a turnpike. The capital stock is \$10,000.

Helena—Electric-light Plant.—The Anchor Oil Co. is reported as to put an electric-light plant in its cotton-seed oil mill.

Little Rock—Foundry and Machine Shop.—D. R. Wing & Co. are erecting an addition 45x100 feet to their foundry and machine shop, as stated in last issue.

Little Rock—Electric-light Plant.—The Little Rock Electric Light Co. is reported as to improve its power-house.

Little Rock—Saw Mill.—Hill & Loomis will erect, it is reported, a saw mill.

Little Rock—Real Estate.—The Co-operative Real Estate Co. has been organized with Howard Adams, president; R. E. Douglas, vice-president, and J. B. Suttler, secretary, to deal in real estate. The capital stock is \$1,000,000.

Little Rock—Baking Powder, &c., Factory.—D. Mara & J. H. McMakin have established a spice and baking powder factory, it is reported.

Marianna—Water Works.—A system of water works is reported as being constructed.

Rogers—Ice Factory and Cold-storage Plant.—A stock company will probably be organized to establish an ice factory and cold-storage plant. David Wing can give information.*

Sedgwick—Stave Factory.—A Pennsylvania company is reported as building a stave factory in Sedgwick.

St. Francis—Stave Factory.—A. W. Gills has enlarged his stave factory, recently mentioned.*

Stuttgart—Implement Factory.—B. D. Hurd is rebuilding, in Stuttgart, his agricultural implement factory, reported last week as burned at Pine Bluff.

FLORIDA.

Apalachicola—Shingle Mill.—The Graham Lumber Co. will, it is stated, erect the shingle mill previously mentioned.

Bartow—Phosphate Works, &c.—Messrs. Cordery, Gardner and others will erect the phosphate

works near Falling Creek reported in last issue, and are laying off a new town to be called Phosphate City.

Dutton—Turpentine Still.—L. A. Davis will, it is stated, erect a turpentine still.

Hague—Saw Mill.—E. J. Baird is reported as having put new machinery in his saw mill.

Jacksonville—Paving Block Factory.—Matthew Hays, of Tampa, Fla., is reported as to erect a factory in Jacksonville for the manufacture of paving blocks.

Lakeland—Electric-light Plant and Ice Factory.—Franchise has been granted, it is stated, for the erection of an electric-light plant and an ice factory.

Pensacola—Car-coupler Factory.—The Moomaw Automatic Car Coupler Co. has been organized with a capital stock of \$50,000 for the purpose of manufacturing the patent car coupler of H. E. Moomaw.

Safford—Fertilizer Factory and Phosphate Mines.—A. C. Martin, W. B. Glass, C. G. Evans and others have incorporated the Wekiva Phosphate Co. to develop phosphate mines and manufacture fertilizers. The capital stock is \$10,000.

Tallahassee—Phosphate and Timber Land.—An English syndicate will, it is reported, purchase from W. D. Chipley 40,000 acres of phosphate and timber land along the Steinhatchee river.

Tampa—Laundry.—C. N. Brigham will establish a steam laundry, as lately reported.

Tampa—Lumber Mill.—The Tampa Lumber Co., mentioned in last issue, has purchased the Dixon lumber mill, and will, it is reported, put in new machinery and operate it.

Tampa—Electric-light Plant.—The Florida Electric Co. will put in additional machinery, as recently reported.

Tarpon Springs—Ice Factory.—The Tarpon Springs Irrigation & Development Co., lately mentioned, will erect an ice factory.

GEORGIA.

Athens—Shoe Factory.—J. W. Brumby is reported as erecting the shoe factory previously mentioned.

Atlanta—Sewerage System.—The construction of a sewerage system to cost \$95,000 is being considered by the city. The mayor can give information.

Blythe—Lumber Mill.—S. M. McNair is reported as having erected a lumber mill.

Brunswick—Stave and Shingle Factory, etc.—Eben Blodgett, of Charleston, S. C.; C. S. Gardner, of Chicago, Ill.; F. A. Boyle and others have incorporated the Brunswick Stave Co. to erect shingle and stave factory, lumber mills, etc. The capital stock is \$50,000.

Bunkley—Electric-light Plant.—The Cumberland Island Co. is reported as to establish an electric-light plant on Cumberland Island.

Carrollton—Saddle and Harness Factory.—J. A. Mitchel has started the saddle and harness factory mentioned last week.*

Colquitt County—Timber Lands.—W. W. Ashburn, of Eastman, is reported as having purchased 2,000 acres of timber lands in Colquitt county.

Dalton—Marble Quarry.—Eastern capitalists are reported as having purchased a black marble quarry from C. L. Hardwick & Co. and as to develop it.

Dalton—Marble Works.—Pratt & Thurston (Northern parties) are reported as having purchased 320 acres of marble land near Dalton from Mrs. M. H. Maddox, and as to organize a \$200,000 stock company to develop same and erect marble works.

Dawson—Electric-light Plant.—C. G. Barfoot is, it is stated, organizing a \$30,000 stock company to operate the electric-light plant recently mentioned as contracted for.

Dublin—Water Works.—A system of water works is reported as to be constructed. A. H. McLaws can give information.

Elberton—Land Improvement.—I. G. Swift, W. M. Adams, L. M. Heard and others have organized the Elberton Land & Improvement Co.

Fannin County—Gold Mine.—Atlanta capitalists are reported as developing a gold mine in Fannin county.

Kingsdon—Saw Mill.—Whitworth & Scott are reported as erecting a saw mill.

Macon—Saw Mill.—The Bibb Land & Lumber Co. is erecting the new saw mill mentioned last week.

Marietta—Electric-light Plant.—The Marietta Electric Co. will, it is reported, put new machinery in its electric-light plant.

Rocky Ford—Sash, Door and Blind Factory.—Stillwell, Miller & Co. have erected the sash, door and blind factory recently mentioned.

Savannah—Electric-light Plant.—The Brush Electric Light & Power Co. will, it is reported, put new machinery in its electric-light plant.

Savannah—Mattress Work.—J. F. Gaynor has, it is stated, received contract for the mattress work on the Savannah river and harbor at \$277,000.

Savannah—Gas Works.—It is stated that works for the manufacture of Pintsch gas will be built.

Stewart County—New Town.—W. H. Tatum, of Lumpkin; D. B. Fitzgerald, of Florence, S. C.; J. C. Prather, of Columbus, and others have organized the Omaha Improvement Co. to improve the new town of Omaha, in Stewart county.

KENTUCKY.

Bowling Green—Electric-light Plant.—The city will put new machinery, it is reported, in its electric-light plant.

Bowling Green—Saw Mill.—Nash & Son are erecting a saw mill near Bowling Green.*

Cat Creek—Roller Flour Mill.—R. C. Mansfield will, it is stated, remodel his flour mill to the roller system.

Covington—Publishing.—C. C. Bragg, C. H. Thompson, C. F. Hofer and others have incorporated the Thompson Co. to publish school books. The capital stock is \$50,000.

Crittenden—Land.—The Crittenden Mineral Land Co. has been organized in Marion for the purpose of developing Crittenden.

Danville—Electric-light Plant.—A stock company will, it is stated, be organized for the purpose of erecting an electric-light plant.

Henderson—Distillery.—The Winstead Distilling Co., reported in last issue, has purchased the whiskey distillery of Hill & Winstead, and will operate it.

Henderson—Flour Mill.—The erection of a flour mill is contemplated by the Wheelers of Henderson county.

Hickman—Lumber Mill.—The Hickman Lumber & Manufacturing Co., lately mentioned, is putting in spoke machinery, and has recently enlarged its lumber mill.*

Jackson—Lumber Mill.—The Atwater Land & Lumber Co., of Atwater, Wis., has purchased, it is reported, the lumber mill of Hogg & Flannery for \$100,000.

Lexington—Real Estate.—A. M. Alger and J. H. Beauchamp have incorporated the Northern Investment Co. for the purpose of dealing in real estate, &c. The authorized capital stock is \$200,000.

Louisville—Electric Plants, &c.—W. T. Grant, J. J. Harrison, Dexter Belknap and others have incorporated the Gooch Electric Light Co. to manufacture and sell electric light, heat and power.

Louisville—Land Improvement.—The Commercial Lot Co., reported in last issue, has purchased land in Jefferson county and will improve it.

Louisville—Lumber Mill, &c.—Benjamin Crawford, C. L. English and D. W. Voorhees have incorporated the Southern Tie & Lumber Co. to manufacture and deal in lumber, &c. The capital stock is \$130,000.

Louisville—Electric-light Plant.—The Louisville Gas Co. has received contract to light the city and will probably erect an electric-light plant.

Maysville—Broom Factory.—L. F. Patillo has, it is reported, erected a broom factory.

Newport—Phosphate Lands.—W. H. Justice, F. W. Mayerhaus, M. W. Lane and others have incorporated the Homeland Mining & Land Co. for the purpose of dealing in and developing phosphate lands, &c. The capital stock is \$50,000.

Newport—Fireworks Factory.—W. H. Forbes, J. S. May, Philip Engelskirger and others have incorporated the Universal Fireworks Co. to manufacture fireworks, pyrotechnics, flags, &c. The capital stock will be \$2,500,000.

Newport—Fireworks Factory.—The North American Fireworks Co., recently reported, is to have a capital stock of \$4,000,000.

Ruddell's Mills—Whiskey Distillery, &c.—William Adams, B. F. Bowen, Levi Weiskoff and others have incorporated the Bourbon County Distilling Co. to manufacture whiskey, operate cooperage, &c. The capital stock is \$25,000.

LOUISIANA.

Alexandria—Bridge.—The Rapides Bridge Co. Limited, has been incorporated with B. Turner, president; R. W. Bringham, vice-president, and G. W. Bolton, secretary, for the purpose of constructing the bridge over Red river, lately reported.

Homer—Ice Factory, Handle Factory, &c.—The establishment of an ice, broom, axe-handle, spoke factory and a shingle mill is contemplated.

Jeannerette—Lumber Mills, &c.—It is stated that two more lumber mills and a shingle mill will be established.

Lafayette—Oil Well.—Israel Falk, recently mentioned, has sunk an oil well.

Magnolia—Diffusion Plant.—H. C. Warrick is reported as erecting a diffusion plant.

New Orleans—Steerine and Tallow Factory.—The Butchers' Hide, Tallow & Steerine Co., Limited, has been incorporated with A. J. Claverie, president; C. W. Savini, vice-president, and John Claverie, Jr., secretary, to manufacture steerine, tallow, etc. The capital stock is \$10,000.

MARYLAND.

Baltimore—Manufacturing, &c.—L. H. Baldwin, E. F. Kirwan, Allen Hoffman and others have incorporated the Enterprise Patent Promoting & Manufacturing Co. to deal in patents, &c.

Baltimore—Real Estate.—A. G. Carroll, J. A. Babb, Andrew Jones and others have incorporated the Colored Co-operative Co. for the purpose of dealing in real estate.

Baltimore—Mining, &c.—A. H. Martin and S. T. Bastian, of Pennsylvania, G. W. H. Craig and others have incorporated the Eastern Kentucky Improvement, Mining & Land Co. with a capital stock of \$1,000,000.

Easton—Bridge.—A bridge is reported as to be built across the Tuckahoe river.

Federalburg—Box Factory and Planing Mill.—Fester & Wright are erecting a box factory and planing mill.

Hagerstown—Silk Mill.—S. M. Schindell will operate the silk mill reported in last issue.

Hagerstown—Electric-light Plant.—The Hagerstown Electric Co. will, it is reported, put new machinery in its electric-light plant.

Locust Grove—Creamery.—It is reported that the plant of the Chesapeake City Creamery has been purchased by parties who will organize a stock company to operate it at Locust Grove.

Washington, D. C.—Laundry.—C. A. Harkness has prepared plans for a steam laundry, 78x196 feet, to be erected by the Swiss Steam Laundry Co. at a cost of \$10,000.

Washington, D. C.—Electric-light Plant.—The United States Electric Lighting Co. is reported as to enlarge its electric-light plant.

MISSISSIPPI.

Aberdeen—Car Works.—The Tombigbee Iron Works, reported in last issue, expects to add car works to its plant within a few months.

Carrollton—Cotton and Woolen Mill.—A. E. Randle, of Washington, D. C., has purchased the Carrollton cotton and woolen mill property, will put in new machinery and operate it.

Pearlington—Lumber Mill, &c.—It is stated that an English syndicate is negotiating for the purchase of the Pearlington mill and pine land interests in Louisiana of Messrs. Poitevant & Favre.

Water Valley—Water Works.—A. F. Benson, of Batesville, Ark., has received franchise to construct, at a cost of \$30,000, the water works recently mentioned.

Water Valley—Cotton Mill.—It is stated that the Yocona Mills has put additional machinery in its cotton mill as previously contemplated.

Water Valley—Electric-light Plant.—It is stated that the city has contracted with the Thomson-Houston Electric Co., of Boston, Mass., for the erection of the electric-light plant recently mentioned.

NORTH CAROLINA.

Alma—Lumber Mill.—The Alma Lumber Co. will double the capacity of its lumber mill, as stated in last issue.

Asheville—Medicine Factory.—C. R. Kopp and G. A. Litchberger will, it is reported, start a patent medicine factory.

Bryson City—Saw Mill.—Mr. Willhyde is reported as having removed his Graham county saw mill to Bryson City.

Cedar Falls—Saw Mill and Shuttle-block Factory.—O. R. Fox, J. W. Tippet, J. A. Henson and others have erected a saw mill and shuttle-block factory.

Elizabeth City—Lime-kiln.—N. R. Zimmerman is reported as to erect a lime-kiln.

Hendersonville—Sewerage System and Water Works.—The city has issued \$15,000 of bonds for the purpose of extending its system of water works and constructing a sewerage system.

Lexington—Tobacco Factory.—A. A. Springs is erecting the plug tobacco factory mentioned last week.

Morganton—Real Estate.—S. D. Dunavant, Z. T. Corpening, W. H. Roberts, of Augusta, Ga., and others have organized the Morganton Real Estate Co. to deal in real estate, &c.

Murphy—Land Improvement.—The Murphy Improvement Co. has been incorporated with B. N. Duke, president; A. B. Andrews, vice-president, and T. H. Martin, secretary. The property of this company consists of 400 acres of land in and around Murphy, which it will improve. The capital stock is \$500,000.

Oxford—Planing Mill and Sash, Door and Blind Factory.—A Northern company is negotiating for the erection of a \$20,000 planing mill and sash, door and blind factory in South Oxford. The Oxford Land, Improvement & Manufacturing Co. can give information.

Raleigh—Saw Mill.—Ellington, Royster & Co. will erect a saw mill, as reported in last issue.

Raleigh—Land.—The North Side Land Co. has been organized with J. A. Jones, president; C. M. Hawkins, vice-president, and T. P. Jerman, Jr., secretary, to develop the Briggs and Womble tracts of land near Raleigh.

Shelby—Land.—The Shelby Land, Loan & Improvement Co. is reported as having purchased 137 acres of land between Shelby and Cleveland Springs, and as to improve same.

Union County—Gold Mines.—W. A. Dietrick, of Boston, Mass., is president of the American Mining & Manufacturing Co., recently organized to purchase and develop the old Hemby gold mine. This company has, it is stated, erected a Wiswell mill and added a concentration plant to the mines.

Weldon—Canal, Cotton Mill, Oil Mill, &c.—It is stated that the Great Falls Manufacturing & Improvement Co. has increased its capital stock to \$2,000,000, will construct a canal, and has made arrangements for the establishment of a grist mill, cotton mill, cotton-seed oil mill and peanut mill at its water-power near Weldon.

Wilmington—Cotton Mill.—The Wilmington Cotton Mills will put in additional machinery.

Winston—Tobacco Factory.—T. J. & N. S. Wilson are enlarging their tobacco factory, as reported in last issue.

SOUTH CAROLINA.

Charleston—Publishing.—The Southern Stamp & Publishing Co., reported in last issue, has for its purpose the publication of the Southern Philatelist, Seaside Thought, &c.

Chester—Electric-light Plant.—The Chester Manufacturing Co. has put an electric-light plant in its cotton mill, as recently reported.

Columbia—Sewerage System.—D. B. Miller is preparing plans for the construction of a sewerage system, it is stated.

Columbia—Electric-light Plant.—The Congaree Gas & Electric Co. will, it is reported, put new machinery in its electric-light plant.

Darlington—Electric-light Plant and Water Works.—The Darlington Light, Water & Power Co. has been organized with a capital stock of \$25,000 to erect an electric-light plant and construct water works.

Easley—Buggy and Wagon Works.—R. W. Holcombe has established buggy and wagon works.

Easley—Shoe Factory and Tannery.—It is probable that a shoe factory and tannery will be established. J. R. Gossett can give information.

Sumter—Electric-light Plant.—The Sumter Electric Light Co. will, it is reported, put new machinery in its electric-light plant.

Union County—Cotton Factory.—The Lockhart Manufacturing Co., previously mentioned, is making arrangements to commence work on its \$500,000 cotton factory at Lockhart Shoals.

TENNESSEE.

Blount County—Manganese Works, &c.—Curd & Davis, of Chattanooga, will develop the manganese mines mentioned in last issue, and build manganese works.

Bolivar—Stave Factory.—H. L. Wallace has established a stave factory, as recently stated.

Bristol—Furniture Factory.—Sweeney & Long are reported as having erected a furniture factory.

Bristol—Bottling Works.—J. W. Waynick will erect new bottling works, as reported in last issue.

Buchanan—Roller Flour Mill.—G. W. Swor is reported as erecting a roller flour mill to be operated in connection with his distillery.

Chattanooga—Saw Mill.—Snodgrass & Field have improved their saw mill and put in additional machinery.

Chattanooga—Steel Plant.—Philadelphia and Pittsburgh (Pa.) parties are reported as to construct a steel plant in Chattanooga.

Chattanooga—Car Works and Iron Foundry.—The Chattanooga Car & Foundry Co. is rebuilding its foundry, reported last week as burned.

Chattanooga—Iron Foundry.—The Cahill Iron Works is reported as enlarging and increasing the capacity of its iron foundry.

Chattanooga—Planing Mill.—J. L. Hoyal, T. G. Gillespie, J. W. Angel and others have, it is stated, organized a company to erect a steam planing mill.

Chattanooga—Land.—The Harrison Land Co. has been incorporated.

Chattanooga—Cotton Mill.—Vance Kirby and T. G. Montague will, it is stated, improve and put in operation the Fort Negley Cotton Mill.

Clarksville—Brick Works.—W. A. Settle will put drying machinery in his brick works.

Clarksville—Steel Plant.—The Gracey-Woodward Iron Co. and others will organize a stock company to construct the steel plant mentioned in last issue.

Clinton—Saw and Planing Mill.—An \$18,000 saw and planing mill will, it is reported, be erected.

Harriman—Laundry.—A \$2,500 stock company will be organized to establish the steam laundry lately mentioned.

Johnson City—Marble Works.—W. D. Stuart, of Whitesburg, is president; W. R. Rhea, vice-president, and W. J. Palmer, secretary, of the Johnson City Marble Works, previously reported.

Johnson City—Fire-clay Works.—The Johnson City Brick Co. is reported as having purchased fire-clay beds near Johnson City, to develop same and as to erect fire-clay works.

Knoxville—Bridge.—Contract has been let at about \$15,000 for the construction of the Fifth avenue bridge, previously mentioned.

Memphis—Corn Meal Mill and Grain Elevator.—The Empire Elevator, Mill & Warehouse Co. will, it is stated, erect a grain elevator with a capacity of 200,000 bushels and a 600-barrel corn meal mill.

Morgan County—Saw Mill and Timber Lands.—Day & Matthews are reported as having purchased 2,200 acres of timber land in Morgan county and as to erect a saw mill.

Nashville—Stock-yards.—L. L. Baxter is president; M. S. Cockrell, vice-president, and W. A. Alsford, of Lincoln, Neb., secretary of the Great Southern Stock Yards Co., reported in last issue. The company has purchased 939 acres of land as site and will, it is stated, erect two packing-houses at a cost of over \$500,000. The capital stock is \$1,000,000.

Nashville—Flour Mill.—J. J. McCann is reported as organizing a stock company to be known as the Model Mill Co. for the purpose of erecting a flour mill.

Nashville—Mattress and Spring Factory.—J. W. Young, J. E. Mann, T. J. Allen and others have incorporated the Rock City Spring & Mattress Co.

Newport—Water Works.—The Newport Water Works has been incorporated.

Spring City—Flour Mill.—J. L. Hayal, J. W. Angel, S. M. Watkins and others are reported as to establish a flour mill.

TEXAS.

Austin—Sewerage System.—The construction of a sewerage system at a cost of about \$21,000 is talked of. W. B. Brush can give information.

Beaumont—Car Works.—J. C. Moulton, of Louisiana, N. H.; J. F. Nickerson, of Boston, Mass.; J. M. Lunt, of Boston, Mass., and others have incorporated the Beaumont Car Works, lately reported as organized.

Beeville—Cotton Gin.—A cotton gin is reported as to be erected.

Cleburne—Bridge.—The Cable Bridge Co. has received contract at \$1,950 for the construction of the bridge over West Buffalo river recently mentioned.

Comanche—Ice Factory and Electric-light Plant.—C. E. McCallough, of Granberry, is reported as organizing a stock company to erect an ice factory and an electric-light plant in Comanche.

Corsicana—Artesian Well.—The sinking of an artesian well is probable.

Dallas—Factory.—C. A. & M. L. Hill are reported as having erected an \$18,000 factory.

Dallas—Laundry.—The Logan Laundry & Manufacturing Co. has been incorporated.

Dallas—Soap Factory.—Hill Bros. have started a soap factory, it is stated.

Dallas—Ice Factory.—The Dallas Ice Factory & Cold Storage Co. is erecting an ice factory with a daily capacity of 150 tons, as stated last week.

Dallas—Lumber Mill.—The Cypress Lumber Co. has been incorporated with a capital stock of \$25,000.

Denton—Water Works.—W. J. Williams, of Dallas, has received franchise for the construction of water works, as stated recently, and is organizing a stock company to build and operate same.

Dublin—Canning Factory.—The Dublin Canning & Manufacturing Co. will, it is stated, increase its capital stock to \$500,000.

Eucinal—Charcoal Works.—Charcoal works are reported as to be established.

Fort Worth—Paper Mill.—Dr. Buck, of Illinois, and others will, it is stated, establish the paper mill lately reported at a cost of about \$270,000.

Galveston—Artesian Well.—The water works committee has recommended the acceptance of the bid of J. P. Miller & Co., of Chicago, Ill., for the sinking of a 6-inch artesian well at \$75,000.

Gonzales—Brick Works.—Mr. Jobe is reported as having put new machinery in his brick works.

Hillaboro—Packing-house and Sausage Factory, &c.—A sausage factory and pork packing-house are reported as to be established.

Houston—Dyeing Works.—W. R. Potter is reported as to erect dyeing works.

Houston—Publishing.—A stock company is reported as being organized to publish a newspaper.

Houston—Cotton Bagging Factory.—The Moss Collar & Bagging Factory, of Fort Worth, has made the proposition recently mentioned for the establishment of a cotton bagging factory in Houston.

Ladonia—Artesian Well.—An artesian well will probably be sunk.

Laredo—Soap Factory.—A soap factory is reported as to be established.

Laredo—Iron Foundry and Machine Shop.—R. E. Sanford, of Ohio, has purchased the plant of the Laredo Foundry & Machine Co., will put in \$7,000 worth of new machinery and operate same, as reported in last issue.

Longview—Plow Works.—The Kelly Plow Manufacturing Co. will, it is stated, put new machinery in its plow works.

Longview—Water Works.—The construction of a system of water works is projected.

Mexia—Agricultural Implement Works.—Agricultural implement works will probably be established.

Orange—Lumber Mill.—Messrs. Litcher & Moore, previously mentioned, have incorporated the Litcher & Moore Lumber Co. with a capital stock of \$1,000,000.

Paris—Coal Mine.—Webster Snyder is president, and S. J. Wright, vice-president of the Caval Coal & Mining Co., previously reported as organized at Dallas. The company has leased coal lands and will develop.

San Angelo—Manufacturing.—The Rulon Manufacturing Co. has been incorporated with a capital stock of \$30,000.

San Antonio—Artesian Wells.—A number of artesian wells are reported as to be sunk along its line by the Galveston, Harrisonburg & San Antonio Railway Co.

Seymour—Electric-light Plant. Water Works, &c.—O. J. Gorman & Co., of Houston, have received contract to erect an electric-light plant and ice factory and construct water works, as recently stated.

Texarkana—Water Works.—The West Side Water Works and franchise have, it is stated, been purchased by W. L. Whittaker for \$50,000.

Victoria—Roundhouse.—The Southern Pacific Railroad Co. is reported as building a roundhouse in Victoria.

Walk—Cotton Gin.—J. H. Walk and Jerry Fannon are erecting the cotton gin mentioned last week.

Yoakum—Water Works.—It is stated that \$55,000 is the contract price for the construction of the water works recently mentioned.

VIRGINIA.

Bedford City—Engine Works.—The Taylor Manufacturing Co., of Chambersburg, Pa., is reported as having closed contract for the removal of its engine works to Bedford City, and a \$200,000 stock company is to be organized to operate the plant.

Bedford City—Land.—The Virginia Land Co. has been organized with M. L. Eure, president; J. W. Perry, vice-president, and L. D. Starke, Jr., secretary.

Big Stone Gap—Furniture Factory.—A \$50,000 stock company has been organized to erect a furniture factory. W. A. Simmons can give information.

Blacksburg—Coal Mines.—Scott & Knobe are reported as developing a coal mine near Blacksburg.

Buchanan—Water Works.—J. H. Harlow, of Pittsburgh, Pa., is reported as preparing plans for a system of water works to be constructed in Buchanan by the Central Land Co. at a cost of \$100,000.

Buena Vista—Steel Plant.—The Buena Vista Steel Co., reported last week, has a capital stock of \$300,000.

Buena Vista—Carriage Factory.—C. W. Rigel is reported as having secured site and as to remove his carriage factory from Bridgewater to Buena Vista.

Buena Vista—Rolling Mill.—A Wheeling (W. Va.) party will, it is stated, build the rolling mill lately mentioned.

Charlottesville—Real Estate, etc.—The Albemarle Investment Co. has been incorporated with M. Leterman, president; W. R. Burnley, vice-president, and G. B. Marshall, secretary, to deal in real estate. The capital stock is to be not less than \$10,000 nor more than \$50,000.

Fincastle—Marble Quarries.—The Black Marble & Improvement Co. will be organized by P. G. Fellers and others with a capital stock of \$100,000 to purchase and develop 245 acres of land at Fincastle.

Fredericksburg—Sewing Machine Factory.—A stock company will establish, it is reported, a sewing machine factory.

Glasgow—Car Works.—The Virginia Steel Car Co. will operate the car works lately mentioned.

Glasgow—Bridge, etc.—The South Glasgow Cement & Development Co., recently reported, has a capital stock of \$400,000, and will construct an iron bridge across the James river.

Gordonsville—Land Improvement.—F. R. Fava, Jr., & Co., of Washington, D. C., have received contract to lay off, drain and otherwise improve the Gordon Land Co.'s 2,000 acres of land at Gordonsville.

Lexington—Mineral Lands.—A syndicate is reported as having optioned land near the South river and as to develop same.

Lexington—Land.—The West Lexington Land Co. has been organized with S. M. Donald, of Buena Vista, president; F. D. Coe, secretary, and a capital stock of \$100,000. The property of this company consists of 219 acres of land near Lexington, known as the Barclay Hill Place, which it will improve.

Luray—Water Works.—A. Y. Lee, of Pittsburgh, Pa., has, it is stated, prepared plans for the water works to be constructed by the Valley Land & Improvement Co.

Luray—Iron Foundry and Machine Shops.—As reported in last issue, the Broadway Machine Co., of Broadway, will remove its iron foundry and machine shops to Luray and double capacity of same.

Lynchburg—Builders' Supply Factory.—Adams & Woodson have recently put additional machinery in their builders' supply factory.

Lynchburg—Bridge, Land, etc.—The Lynchburg and Roanoke capitalists, recently mentioned in connection with the Buckner property, are negotiating for the purchase of same, and if successful will organize the Garland Heights Land Co. to improve same and build an iron bridge across Blackwater creek.

Manchester—Cotton-seed Oil Mill.—A cotton-seed oil mill is reported as being erected.

Manchester—Harness Factory.—A harness factory is reported as to be established.

Manchester—Railroad Supply Factory.—The Richmond Standard Spike & Iron Co. has incorporated with Byrd Warwick, president, and J. T. Anderson, secretary, and, it is stated, increased its capital stock to \$250,000.

Mineral City (P. O. at Louisa C. H.)—Knitting Mill.—It is stated that a knitting mill will be established. The Mineral City Mining, Manufacturing & Land Co. can give information.

New Castle—Bridge.—A bridge is reported as to be built across Craig's creek. The Junction City Land & Improvement Co. can give information.

New Castle—Mineral and Timber Land.—A E. Humphreys has purchased the Haupt property, as recently reported, and organized the Mountain Lake Land & Improvement Co. to develop it.

New Castle—Iron Furnace.—It is stated that the Junction Land & Improvement Co. has subscribed \$50,000 towards the construction of the iron furnace previously mentioned.

Newport News—Development.—The Newport News, Hampton & Old Point Development Co. has been incorporated with J. T. Ellyson, president, E. C. Venable, of Petersburg, vice-president, and G. A. Schmelz, of Hampton, secretary. The capital stock is to be not less than \$100,000 nor more than \$2,000,000.

Newport News—Land Improvement.—The Old Dominion Investment Co. has been incorporated with L. P. Stearnes as president; W. S. Upshur, of Norfolk, vice president, and W. E. Cottrell, secretary, to improve land, etc. The capital stock is to be not less than \$13,000 nor more than \$100,000.

Norfolk—Artesian Well.—An artesian well is being sunk at Lambert's Point.

Norfolk—Land Improvement.—The Norfolk Rolleston Co. has been incorporated with J. W. Gerow, president; Barton Myers, vice-president, and D. Lowenbury, secretary, for the purpose of improving land, etc. The capital stock is to be not less than \$20,000 nor more than \$50,000.

Norfolk—Iron Furnace, etc.—It is stated that an iron furnace will be constructed and an underwear factory and hosiery factory be established. The Norfolk Industrial Development Co. can give information.

Petersburg—Engine and Pump-house.—The Petersburg Granite Quarrying Co. has rebuilt its engine and pump-house, reported last week as burned.

Portsmouth—Real Estate.—The Portsmouth & Norfolk Investment Co. has been organized with J. S. Jenkins, president; J. T. Lawless, vice-president, and W. W. Perkins, secretary, to deal in real estate, etc. The capital stock is to be not less than \$10,000 nor more than \$50,000.

Richmond—Real Estate.—The Howard's Grove Development Co. has been incorporated to deal in real estate with L. A. Burwell, president, and G. W. Shuman, secretary. The capital stock is to be not less than \$10,000 nor more than \$85,000.

Richmond—Land.—The Richmond & Harrisonburg Land Co., lately reported as organized, has been incorporated with a capital stock of \$200,000. The company is reported as having purchased 359 acres of land at Harrisonburg at a cost of \$97,000.

Richmond—Real Estate, etc.—The Fairmount Land Co. has been incorporated with J. H. Dinneen, president; John Mahony, vice-president, and N. W. Bove, secretary, to deal in real estate, etc. The capital stock is to be not less than \$100,000 nor more than \$300,000.

Richmond—Ice Machine Factory.—William Simpkin has prepared plans for the erection of an ice machine factory, to be built by the Richmond Ice Machine Co. at a cost of \$4,000.

Roanoke—Planing Mill.—It is reported that the Wilmett planing mill has been purchased by parties who will organize a stock company to operate it.

Roanoke—Shoe Factory.—The establishment of a shoe factory is contemplated.

Roanoke—Real Estate.—The Hill City Investment Co. has been organized with W. R. Harwood, president; C. T. Calhoun, vice-president; and Miss M. L. Tanner, secretary, to deal in real estate.

Salem—Clothing Factory.—The Holstein Woolen Co. will erect a clothing factory, as previously reported, 100x50 feet, to operate in connection with its woolen mill.

Shenandoah—Water Works.—Howard Murphy, of Philadelphia, Pa., is preparing plans for the water works previously reported as to be constructed by the Shenandoah Land & Improvement Co. Contract has been let.

Shenandoah—Carriage, Buggy and Wagon Factory.—G. T. Williams & Co., of Cincinnati, Ohio, have signed contract to erect a carriage, buggy and wagon factory in Shenandoah, as reported last week.

Shenandoah—Bottling Works.—Haase & Moore have, it is stated, established bottling works.

Shendun—Plumbers' Supply Works.—C. H. Rose, of New York city, has, it is stated, contracted with the Grottoes Co. for the establishment in Shendun of a plumbers' supply works with a capital of \$50,000.

Staunton—Brass and Woodworking Factory.—John Kroder, of New York city, will erect in Staunton a factory for the manufacture of brass goods and curtain poles.

Staunton—Furniture Factory.—The Staunton Furniture Manufacturing Co. is rebuilding its finishing and storage building, previously reported as burned.

Staunton—Real Estate, etc.—The West Staunton Land Addition Co., with a capital stock of \$10,000, has been incorporated with S. D. Timberlake as president; M. M. Robertson, vice president, and C. W. Warden, secretary, to deal in real estate, secure the establishment of manufacturing, etc. The company has purchased the Asher Ayres tract of 40 acres of land near Staunton.

Staunton—Improvements.—As stated in last issue, W. E. Craig has purchased the Old Staunton Iron Works property and will improve same.

Suffolk—Electric-light Plant.—The Suffolk Kindling Wood Factory is reported as having put in an electric-light plant.

Suffolk—Land.—The Lakeshore Land & Investment Co. is being organized, and is reported as having purchased the Edgar Lawshe farm for \$10,000 and to improve same.

Suffolk—Land Improvement.—The River View Land Co. has been organized with G. W. Black, of Norfolk, as president; A. S. Eley, vice-president, and Sydney Britt, secretary. The company has purchased and will improve the Dumville farm.

Suffolk—Planing Mill.—Gosler & Watts are reported as erecting a planing mill.

Vaughan—Oil Wells.—J. M. McKinney is president, and E. C. Lathrop, secretary, of the Graham Oil Co., lately reported as organized to sink oil wells near Vaughan.

Verbena—Flour Mill.—L. A. Smith, of Advance Mills, has purchased and will operate, it is reported, the Verbena flour mill.

Windsor Station—Coffin Factory.—The Windsor Coffin Co. is reported as organized with S. H. Hines, of Baltimore, Md., as secretary, to establish a coffin factory.

Wytheville—Cigar Factory.—A Northern party will, it is stated, establish a cigar factory in Wytheville. The Wytheville Development Co. can give information.

Wytheville—Sash, Door and Blind Factory.—It is stated that a \$15,000 sash, door and blind factory will be removed to Wytheville. The Wytheville Development Co. can give information.

Wytheville—Stove Works.—The Virginia Stove & Range Co. will operate the stove works recently reported.

Wytheville—Brick Works.—S. R. Huford has put new machinery in his brick works, as reported in last issue.

WEST VIRGINIA.

Brooke County—Mining.—Henry Williams, of Pittsburgh, Pa., has, it is stated, leased 20,000 acres of mineral land in Brooke and Ohio counties, and will develop same.

Charlestown.—The Charlestown Construction Co. has been organized with F. W. Brown, president, and J. A. Washington, secretary.

Fairmount—Gas and Oil Wells.—J. F. Frazier, of Hoult, T. H. Barnes, T. B. Harden and others have incorporated the Eldorado Oil & Gas Co. for the purpose of sinking oil and gas wells.

Fairmont—Coal Lands.—Hons. James G. Blaine, S. B. Elkins, H. G. Davis and others are reported as having purchased 25,000 acres of coal lands near Fairmont, and 15,000 acres in Monongalia county.

Franklin—Coal Mines, &c.—The Pendleton Development Co. has been incorporated to develop coal mines, &c.

Greenbrier County—Iron Mines.—A syndicate is reported as to develop an iron mine in Greenbrier county.

Harrison County—Coal Mines, &c.—Morris & Ewing, of Osceola Mills, Pa., and others have purchased, it is reported, the lease of the Harrison county coal mines and coke ovens, and propose to develop them.

Hinton—Electric-light Plant.—Franchise has been granted for the erection of an electric-light plant. R. B. Flanagan can give information.

Kingwood—Electric-light Plant.—The Edison Electric Light Co. has received contract, it is reported, for the erection of the electric-light plant lately mentioned.

Mannington—Oil Wells.—Watson, McGraw & Co. will sink additional oil wells.

Monongalia County—Coal Mines, &c.—France & Co., of Chicago, Ill., have purchased the Buckwood and Clements coal mines in Monongalia county, including 200 coke ovens, and will, it is reported, develop and operate same.

New Cumberland—Fire-brick Works.—Smith, Porter & Co. have put new drying apparatus in their fire-brick works, as stated last week.

Parkersburg—Wire Nail Factory, Machine Shops, &c.—The stock company lately mentioned as to be organized by J. H. Cole and others to establish a Hastings wire nail factory has been incorporated as the Triple Wire Nail Machine Co. with a capital stock of \$15,000. The company also proposes to establish foundry and machine shops.

Point Pleasant—Electric-light Plant.—D. S. Snyder is reported as to establish an electric-light plant.

Wheeling—Glass Works.—The Hobbs Glass Co. is rebuilding its glass works, as recently reported.

Wheeling—Coal Mines.—The Forest Coal Co., reported in last issue, has purchased coal lands which it will develop.

Building Notes.

Americus, Ga.—A building for the Young Men's Christian Association to cost about \$6,000 will probably be erected.

Anniston, Ala.—Sewell & Nash have secured contract for building a residence for G. P. Simpson, and F. E. Baker for a residence for Rev. M. Grebb. Miller & Butts prepared the plans.

Athens, Ga.—Church.—The members of the Episcopal church contemplate building an edifice.

Augusta, Ky.—Warehouse.—T. Rawlins & Son, of Dayton, have contract for building a store and warehouse in Augusta.

Baltimore, Md.—The Builders' Exchange, previously reported, has purchased site on which to erect a building.

Baltimore, Md.—Safe Deposit Building.—The Fidelity & Deposit Co. of Maryland has purchased site on which to erect a building.

Baltimore, Md.—Warehouse.—James McGraw will build a four-story brick warehouse.

Baltimore, Md.—Hall.—Rev. E. W. S. Peck will receive proposals until November 15 for the erection of a hall building for Asbury Methodist Episcopal church.

Baltimore, Md.—Building permits have been granted to J. F. Knaus for 12 two-story brick buildings; Louis Langrehr for a two-story brick building; M. R. Hickey, three-story building, and to James Fox, for 4 three-story buildings.

Baltimore, Md.—Schoolhouse.—The school commissioners will probably recommend the city council to appropriate \$8,000 for building a second-story to female grammar school No. 16.

Bessemer (P. O. Eagle Rock), Va.—Hotels.—The Bessemer Investment Co. will build the \$25,000 hotel mentioned last week, and the Bessemer Building & Loan Co. a \$6,500 hotel.

Big Stone Gap, Va.—S. D. Hillsman, of Lynchburg, has let contract for the erection of a store and office building.

Birmingham, Ala.—F. Caheen will erect a four-story brick building 50x150 feet to cost \$75,000.

Bristol, Tenn.—The Holston National Building & Loan Association has been organized with A. D. Reynolds, president; M. T. Devault, secretary, and J. C. Anderson, treasurer.

Buchanan, Va.—The Virginia Real Estate & Investment Co. contemplates erecting a three-story building 50x100 feet.

Camden, S. C.—S. B. Latham will erect a stable in place of one recently burned. The loss was \$8,000.

Cedartown, Ga.—S. R. Kirkwood is reported as building a brick block.

Charleston S. C.—Hotel.—A project for building a large hotel is being revived under the auspices of the Chamber of Commerce.

Chattanooga, Tenn.—Theatre.—Philadelphia and local parties are reported as endeavoring to purchase a site on which to build a theatre. Latham & Son can give information.

Clifton Forge, Va.—Thomason & Shirkey have secured contract for erecting a store building 25x90 feet for Mayers & Keelsky.

Dallas, Texas.—The Messrs. Studebaker, of South Bend, Ind., contemplate building two residences at Oak Cliff.

Dallas, Texas—Sanitarium.—A sanitarium to be built at Oak Cliff at a cost of \$150,000 is reported as being negotiated for.

Dallas, Texas.—M. A. Orlopp, of Little Rock, Ark., will, it is stated, prepare plans for a seven-story building for T. Scollard to cost \$100,000.

Durham, N. C.—Bank Building.—The First National Bank has purchased a site and will erect a building to cost about \$25,000, as stated last week. It is to be equipped with the most approved appliances.

Danville, Va.—The building of a home for Confederate soldiers is contemplated.

El Paso, Texas—Schoolhouse.—A schoolhouse to cost about \$10,000 is to be built. W. B. Brack can give particulars.

Farmersville, Texas—Hotel.—A stock company will probably be organized to build a \$12,000 hotel.

Fort Thomas, Ky.—Hospital.—Lieutenant R. R. Turner, U. S. A., will receive proposals until November 27 for the erection of a hospital and hospital steward's quarters.

Fort Worth, Texas—City Hall.—J. P. Smith, mayor, recommends to the city council the building of a city hall to cost \$125,000.

Fort Worth, Texas.—S. A. Tomlinson has secured contract for the erection of the six-story building, 95x100 feet, for Mrs. E. A. Hendricks, previously mentioned; the estimated cost is \$150,000. Haggart & Sanguinet prepared the plans.

Fort Worth, Texas—Hall.—The Independent Order of Odd Fellows is reported as to build a hall.

Gainesville, Texas.—The Hesperian Building & Savings Association has been organized with a capital stock of \$100,000.

Galveston, Texas.—Benjamin Kiam will build a three-story brick business house to cost \$15,000.

Galveston, Texas.—Clark & Loftus will erect a three-story brick building, 50x85 feet, to cost about \$15,000.

Galveston, Texas—Armory.—Robert Thomson has prepared plans for the erection of a three-story armory building to cost about \$30,000.

Harriman, Tenn.—C. A. Quinn will build a brick business house 25x50 feet.

Haskell, Texas.—College.—A college to cost from \$10,000 to \$20,000 will probably be built.

Hendersonville, N. C.—Town Hall.—A town hall will be built. V. L. Hyman, mayor, can give information.

Jasper, Ala.—Asylum.—It is stated that a county almshouse will be erected near Jasper.

Knoxville, Tenn.—The Lonsdale Land Co. will, it is stated, build 50 houses in the Lonsdale addition.

Little Rock, Ark.—Schoolhouse.—William McDowell has secured contract at \$10,000 for erecting a school building for St. Andrew's School.

Luray, Va.—The Luray Trust, Building & Investment Co. has been chartered with Lemuel Zerke, president, and J. A. Roller, treasurer. The capital stock is \$50,000.

Lynchburg, Va.—Hotel.—Roanoke and Philadelphia parties have offered to build a hotel at Rivermont to cost, including furnishings, not less than \$70,000, if granted certain inducements by the Rivermont Co.

Lynchburg, Va.—College.—The trustees of the Randolph-Macon College have accepted the proposition of the Rivermont Co. to build a college for females in Rivermont. The conditions agreed upon are the raising of an endowment fund of \$100,000 by the trustees and a donation of a site and \$100,000 by the Rivermont Co.

Mechanicsville, Tenn.—Hotel.—A Mr. Williams is reported as to build a hotel.

Montgomery, Ala.—A national building and loan association has been organized with E. C. Tompkins, president; Joseph Griel, vice-president, and Alva Fitzpatrick, secretary. The capital stock authorized is \$25,000,000. It intends organizing branches throughout the country.

New Birmingham, Texas.—Church.—Contract has been let for building an edifice for the Presbyterians.

Norfolk, Va.—Warehouse.—The Norfolk & Portsmouth Cotton Exchange contemplates forming a stock company to build an immense warehouse for cotton between Norfolk and Lambert's Point that will probably cover ten acres of land.

Orangeburg, S. C.—Hall.—L. H. Wannamaker is president of the Union Hall Co., lately reported as having been chartered to erect a hall building.

Owensboro, Ky.—Hotel.—William Foss writes that \$75,000 have been raised to build a hotel.

Oxford, N. C.—Church.—The congregation of the Presbyterian church have contracted for building an edifice. Rev. Joseph Reine can give information.

Pecos City, Texas.—Depot.—The Texas & Pacific Railway Co. (office, New York, N. Y.) contemplates building a depot.

Piedmont, Ala.—The Barlow & Thatcher Spinning Co., of Wilmington, Del., reported elsewhere in this issue as to erect a cotton mill, intends, it is stated, building 20 houses for its employees.

Richmond, Va.—The Howard Grove Development Co., recently organized, contemplates building houses.

Ringgold, Ga.—S. J. Dunn & Co. will rebuild their store building recently burned.

Roanoke, Va.—Gustaf Bottiger will prepare plans for the erection of a five-story brick building for Grinberg & Morris to cost \$40,000.

Sallabury, N. C.—Church.—E. B. Neave will receive proposals until December 10 for building the edifice for the First Presbyterian Church, previously reported.

Salem, Va.—Asylum.—The board of trustees of the Baptist Orphanage have decided to build an orphanage in Salem in consideration of the donation of \$30,000.

Springfield, Ky.—Church.—The Catholics will build an edifice to cost \$17,000. Rev. J. A. Hogarty can give particulars.

Tampa, Fla.—Depot.—The South Florida Railroad Co. (office, Sanford) contemplates building a depot.

Washington, D. C.—Bank Building.—A fireproof bank building will be erected in the spring for the Ohio National Bank. Hon. J. D. Taylor, of Cambridge, Ohio, can give particulars.

Washington, D. C.—Hotel.—A. P. Clark has furnished plans for a five-story addition 17x45 feet to the Metropolitan Hotel. The new building will contain laundry, engine-room, bakery, etc. A steam heating plant will also be put in. The estimated cost is \$40,000.

Washington, D. C.—Miss K. B. Crane will erect a three-story dwelling to cost \$7,600; J. Cooksey, 2 two-story brick dwellings to cost \$8,000; T. A. Harding, a three-story store and dwelling, 24x50 feet, to cost \$5,000; F. Junghaus, 2 two-story brick dwellings to cost \$16,000; J. W. Swainson, a three-story dwelling to cost \$6,500, and G. A. Shehan, 3 three-story dwellings to cost \$15,000.

Winchester, Ky.—Academy.—It is stated that the board of trustees of the Shenandoah Baptist Association have decided to build a collegiate academy in Winchester.

Winchester, Ky.—The Winchester Dormitory Co. has been chartered by W. F. Taylor, J. Flanagan, B. F. Curtis and others with authority for erecting buildings.

Winnabow, S. C.—Depot.—The Richmond & Danville Railroad Co. (office, Richmond, Va.) contemplates building a passenger depot in Winnabow.

Wytheville, Va.—The Wytheville Development Co. has awarded the Wytheville Manufacturing Co. contract for building 10 houses.

BURNED.

Bristol, Tenn.—The machine shops of the South Atlantic & Ohio Railroad Co. near Bristol; estimated loss \$10,000.

Brucetown, Va.—The Nolan Flouring Mill.

Cumberland, Md.—The works of the Cumberland Hydraulic Cement & Manufacturing Co.; loss reported to be over \$30,000.

Howard, N. C.—Four dry kilns of the Cashiel & Chowan Railroad & Lumber Co.

Lake Arthur, La.—The sugar house of J. M. Salle.

Summerdean, Va.—The tannery of S. M. Koogler; loss about \$10,000.

Sunshine, La.—The cooperage of O. Richard.

The cotton gins of B. F. Cock at Senoia, Ga.; W. S. McDonald, near Sharpsburg, Ga.; Will Herring, near Powellville, Ga.; J. B. Washburn, near Attalla, Ala.; Nat Mahorner, near Macon, Miss.; G. W. Duke and J. H. Williams, at Lone Grove, Texas; Mrs. Henry Tumlin, near Cartersville, Ga.; Sanders & Graves, near Hardeeville, S. C.; J. W. Baker & Co., at Dyersburg, Tenn.; Mr. Ginn, near Cartersville, Ga.; William Breedlove, at Mountain Spring, Texas; James Grimesly, at Hookerton, N. C.

THE Buena Vista Land Co., a new corporation, has purchased 530 acres of land in the southeastern part of the thriving Virginia city whose name it bears. The directors of this company are James S. Simmons, Capt. M. M. Rogers, E. C. Pechin, Col. Thomas Lewis, J. T. Engleby, J. W. Krum, C. O'Leary, J. H. Brown, Samuel Crozer, Jr., Chas. G. Eddy, John D. Langhorn and A. C. Denniston, and its executive officers for the first year are Capt. M. M. Rogers, president; James S. Simmons, vice-president; Major H. A. Rogers, secretary and treasurer. This company will at once open up its property, put up buildings and secure manufactories.

More Money Needed.

The recent financial disturbances emphasize the necessity for a more liberal policy on the part of the government, which holds the enormous reserve of \$250,000,000 in the Treasury, while the whole country is suffering from lack of money. The Cleveland administration pursued the wise course of making large deposits in the national banks when needed to relieve stringency. This policy was savagely attacked at the time by the partisan press, and no doubt the unwillingness of the dominant party to vindicate the wisdom of that course has something to do with the failure of the government to vouchsafe the assistance now so much needed. It is to be hoped, however, that public sentiment will compel the laying aside of partisan politics, and that the government will meet the business requirements of the country. From fifty to one hundred millions deposited in the banks would go far toward restoring the monetary equilibrium.

Aside from measures for temporary relief, it is growing plainer every day and is being more and more accepted in orthodox financial quarters as sound that the volume of currency is insufficient, and that there must either be some expansion proportionate to the values of the country or that those values must be reduced to come within the bounds of the circulating medium. The latter would be a process of adjustment which would inevitably be attended by widespread disaster, and is an alternative which will not be accepted unless it is forced on the country by conditions and circumstances which cannot be controlled. Money is a mere measure of values; the values themselves are in real estate, cotton, corn, wheat, stock, iron, etc. Its supply should be diminished or increased according as the actual assets it represents are diminished or increased. Under existing circumstances the supply of money in the United States is ridiculously small, when its wealth in actual property is considered. France and England, with far less wealth per capita, have a much larger circulating medium.

The bankers of the country do not enjoy a complete monopoly of all the wisdom on economical and financial problems. Within the past ten years the bankers have moved further toward the farmers on these questions than the farmers have toward the bankers. The banks have wisely met the recent disturbances with an expansion of the currency by the issuance of clearing-house certificates. Contraction, and not over-speculation, is the cause of the present trouble, and what is now being applied as a remedy ought long ago to have been employed as a preventive.

Clearly the country has outgrown its circulating medium. There is vastly more property than there is money to represent it. Attempting to run an immense business with such

an insufficient medium is like surveying an enormous area with a yardstick. With the existing monetary arrangements the nation's great wealth becomes a curse instead of a blessing. The blame must rest largely with those who, after all, are the greatest sufferers, the financial men who have persistently opposed what they called inflation of the currency. These same people raised a great outcry against the silver bill, though few of them would now gain-say its beneficent effect. In view of the difficulties into which the counsel and guidance of such men has involved us, the business interests of the country will not hastily dismiss as visionary the remedies for undue contraction proposed by the Farmers' Alliance, but will seriously consider these plans as a possibly sound means of bringing nearer together the measures of values and the values themselves, and thus setting free the enchained and handicapped commerce of the nation.

Wall Street Scares Beneficial to the South.

The flurry in the stock market will have the effect of driving investors away from non dividend paying stocks. The good ones are cheap enough now and will be eagerly bought up. But the fearful shrinkage in doubtful securities has been a warning that will be well heeded. Hereafter men will turn to real estate for solid investments. There is property which always has been and always will be the best. No matter what collapses come, nothing less than an earthquake can take such property from the holder. It will always have a use and value, and it is the safest place for money after all.—Baltimore News.

From the beginning of the financial flurry the MANUFACTURERS' RECORD has contended that the effect would be to drive money away from Wall Street and that it would seek industrial, real estate and other solid investments. As no other section is now enjoying special activity, the South stands the best show for this money. The South combines all the advantages of climate, soil and mineral wealth, and hence investments in that section are the soundest and most profitable to be found in the world. As an evidence of the increasing interest of the investing public in the South, financial papers are paying more and more attention to the Southern movement. Among many other comments of similar character we notice the following leading editorial in the Financial News, under the caption "The Prosperous South":

The spirit of this region of our common country is characteristic of a people newly and vigorously aroused to enterprise, and they have been generally favored by nature this year in the gift of enormous crops. In one of our Southern exchanges we notice an estimate of nearly a billion of dollars as the product from the soil, and, while this view may be somewhat sanguine, we have no doubt that the estimate is approximately correct, looking to cotton alone, their chief crop, as figuring \$450,000,000 of this vast sum. The farmers are industrious, and, as a rule, independent in the freedom from debt, and their comfortable

homes give the most satisfactory evidence of thrift and judicious economy. The people are energetic to an enviable degree, and they are happy in home enterprises which are far away from the turmoil and uncertainties of speculation. Many industrial, town building and land companies are embraced in these enterprises.

In the State of Virginia the town of Salem is just now conspicuous in an appropriation of \$500,000 in cash by several land companies to secure the establishment there of a rolling mill, cotton mill and car works. At Buena Vista a company with capital of \$1,000,000 has just been organized to build an extensive steel works, and it seems that every bee in the hive is at work in that region. Indeed, throughout the South, from Maryland to Texas, the smoke of the furnace is seen, and the sound of the mill hammer is heard. Every prospect pleases and gives evidence of activity and prosperity.

In a letter to the editor of the MANUFACTURERS' RECORD, Col. J. W. Barlow, U. S. A. Lieut.-Col. of Engineers, in charge of improvements on the Cumberland and Tennessee rivers and their tributaries, says: "In regard to the effect which this work (the Muscle Shoal canal) will have upon the development of the natural resources of the adjoining country, I beg to say that I can only reflect the general sentiment of the people of this region, which is, in brief, that the connection of the hitherto divided sections of the Tennessee river must greatly stimulate all industries depending upon transportation, and will result in increased prosperity throughout the mineral and agricultural region embraced by Northern Alabama and Georgia and Middle and East Tennessee."

Points from Buena Vista.

BUENA VISTA, VA., Nov. 17, 1890.

Editor Manufacturers' Record:

Buena Vista is to have an organized fire department. The city council has passed an ordinance providing for the government of the department, and has elected as chief a gentleman who was formerly a valuable member of the Richmond (Va.) fire department. A building to be used for an engine-house will be erected before long.

It may not be amiss to give some particulars in regard to the furnace to be put in blast here, mention of which has been made before. This section has been known as productive of iron ore ever since colonial times, and a furnace was first built here in early times; its ruins can yet be seen. In 1847 a more modern furnace was built and named Buena Vista, material from which was used for ordnance for the Confederate army. This was destroyed during the war. The new furnace, of one hundred tons capacity, is built after the latest model. It is to be managed by men of extensive experience in iron making elsewhere. The capital of the enterprise is \$300,000, and the number of hands employed will be 300.

The number of skilled laborers to be employed in Buena Vista will soon reach large proportions. In addition to the 300 just mentioned, the A. K. Rarig Machine Works, from Columbus, O., now have 300 at work, and will have a force of 1,000. The Basic Steel Works will also employ several hundred, and other industries will employ from fifty to a hundred each.

THE machine works offered for sale in our advertising columns afford an opportunity second to none in the South for those who have the necessary money and experience in that line of business. These works are well-established, are located in an enterprising and growing city, and are doing, as they have from the beginning, a profitable business. The owners have other large interests that now require their entire attention, or they would not think of disposing of this establishment.

What an English Paper Says About Southern Iron and Steel Making.

Of the two principal excursions made by the members of the Iron and Steel Institute in the United States, that which attracted the largest number of visitors and proved most interesting was undoubtedly the trip through certain of the Southern States. Many of the members participated in that excursion in order that they might see for themselves the iron ore and coal deposits of which they had heard so much during the past few years, whilst others made the trip in order to decide upon the particular locality in which investments might be made with the greatest freedom from risk and the probability of maximum profits. Every facility was afforded by the local and other committees for seeing all that could be seen within the very limited time at the disposal of the visitors, and the utmost courtesy was manifested on all sides. Under these conditions it is not at all surprising to find that the mineral resources of the Birmingham Middlesborough, Pulaski, Anniston, Shelby, Chattanooga and other districts made a great impression upon the Britishers. The visitors saw the lavish manner in which nature has bestowed her riches upon these Southern States, and, as practical men, they were at some trouble in endeavoring to arrive at something like an accurate forecast of the industrial future of that wide area of the country. When the party arrived at Chattanooga they were freely interviewed, and, from the reports published by one of the local papers, we are enabled to gather the views of some of the most prominent members of the Institute. Broadly stated, the sum and substance of the opinions expressed is that the South can produce any quantity of pig iron at very low figures; that it can make steel best (and probably solely) by the basic open-hearth process, and that it must have a variety of minor industries for working up the pig iron before it is fairly launched upon a career of industrial prosperity. Substantially, this is the gist of the opinions expressed by Sir James Kitson, Sir Lowthian Bell, Mr. Gilchrist, Sir James Bain, Mr. William Whitwell, Mr. Hugh Bell and others. Most of these gentlemen alluded to the rough-and-ready, and therefore wasteful, manner in which the ore deposits are being worked and the coal or coke dealt with; but severe economies are not to be expected in a district revelling in so much mineral wealth, and these "wild oats" of the Southern metallurgists will inevitably cease to be sown directly matters are on a strictly commercial basis and competition has taken the first bloom off selling prices. What is primarily needed in order that the iron and coal of Kentucky, Tennessee, Virginia and Alabama may be developed is capital. That necessity has long been apparent, and it was doubtless the principal (and a perfectly legitimate) reason for conducting the members of the Institute through the States. One result will be, no doubt, a considerable influx of British capital, which will be invested in enterprises similar to those which are already controlled from this side of the Atlantic. The development of Middlesborough, Birmingham, Cumberland Gap and other places has been achieved mainly by British capital, and much of our money is now carrying on industrial operations at Talladega and elsewhere, with results which are not unsatisfactory even now, and with excellent prospects for the future. The continuation of the movement will be beneficial to all concerned. Our surplus capital, where it is wisely and prudently invested, will earn for its owners far higher rates of interest than can be obtained in this country, and will give us a permanent interest in a locality which bids fair to take a very prominent position in relation to the

iron and steel trades of the whole world. Thus all parties should be benefited, and capital may well afford to disregard the criticisms of those who may possibly make disagreeable remarks as to the greater returns reaped under American protection as compared with British free trade. As a matter of fact, this fiscal question does not, and will not, in any sense affect the main issues at stake. The chief effect of protection appears to be to render American manufacturers careless and exceedingly wasteful in their processes. The abolition of all duties would render them economical and careful, thereby doing them an immense amount of good in every way. At present they have no incentive to invention or vital improvements, all their energies (which are great) being concentrated upon big outputs and "raking in the dollars." In due course this will all be altered and amended; but, whatever happens, it seems to be certain that iron and steel making in these Southern States can always be carried on profitably and largely. —London Ironmonger.

NEW INDUSTRIES AT SALEM.

United and Vigorous Action of the Various Companies—A Fund of \$525,000 for New Enterprises.

There is probably no town in the South whose machinery works more smoothly than that of Salem. The ten or twelve companies here act as one man for the upbuilding of the city. Their presidents have organized what is known as the President's Board, holding regular meetings and taking such action as may be for the best interests of Salem, Va.

Following out this admirable policy, the various companies have subscribed a fund of \$525,000, which they propose to invest in new enterprises at Salem, either building and owning their own plants or uniting with outsiders who may thus be induced to locate plants there. They have a careful, business-like organization, and while they will subscribe liberally to good things brought there by good men, they will see to it that they are not imposed upon by weak and failing concerns that may be looking to bonuses for a new lease on life. A part of the fund will be used to secure the Roanoke & Southern.

It has about been determined to establish the following industries: A muck bar mill costing \$75,000, a car works to cost \$100,000, a rolling mill to cost \$100,000, an iron pipe and wire nail works, capital \$50,000, and a cotton mill, capital \$200,000. The new mill of the Holstein Woolen Co. is nearly finished. The main building is 63x155 feet, and the L is 30x28 feet. The same company will immediately commence the construction of a clothing factory four stories high and of 100x50 feet dimensions. This company will manufacture its own mill products, giving employment to at least 100 adults. There is steady, healthful activity in real estate, building operations are exceedingly active, stores are doing a lively trade, strangers are coming every day to see the city, many of whom decide to locate here, letters pour in by every mail from interested inquirers, and altogether the present condition of Salem is all that the most ardent lover of the town could desire, while the prospects for the future surpass the previous expectations of its most sanguine citizens.

Middlesborough's Great Sales.

[Special to the Daily Financial News.]

MIDDLESBOROUGH, KY., Nov. 13, 1890.

The total sales of lots and plots at public auction was \$430,000, and the private sales were \$170,000. Remarkable attendance from all parts of the country. Bidding very spirited to the last. Could have continued selling balance of week, and probably doubled amount of sales. Overwhelmed with inquiries from all over this country and Great Britain. Under negotiations for transfer of machine works from Boston, cotton tie works from Pittsburgh, steel works from Chicago and furniture works from Grand Rapids, Mich.; large brewery, new fire-brick works and novelty wood works all started. Real estate men report, besides the above, their own private sales for the week at over \$200,000. Three thousand acres coal land leased to Philadelphia coal men, who will put in 1,000 coke ovens. The Duke and Duchess of Marlborough, Abram S. Hewitt and other prominent people expected this and next week. Congratulations from London Everybody happy and satisfied.

MACHINERY WANTED.

If you desire to purchase machinery of any kind consult our advertising columns, and if you cannot find just what you wish, send us particulars as to the kind of machinery needed. We will make your wants known free of cost, and in this way secure the attention of machinery manufacturers throughout the country. You will thus get all information desired as to prices, etc.

Baking Powder Machinery.—The Eagle Baking Powder Co., Mobile, Ala., wants catalogues and prices on machinery for a baking powder factory.

Belting.—W. N. Barr, Louisville, Ky., wants belting.

Belting.—The Hickman Lumber & Manufacturing Co., Hickman, Ky., will want belting.

Belting.—M. Stoner, Atlanta, Ga., will want belting.

Boiler.—C. B. Alexander, Emory, Miss., wants a boiler.

Boilers.—J. B. Turnley, Chattanooga, Tenn., wants 10 to 20 cylinder boilers, new, 30 inches diameter and 25 feet long.

Boiler and Engine.—The Broadway Machine Co., Broadway, Va., will want prices on a 25 horse-power boiler and engine.

Boiler and Engine.—M. Stoner, Atlanta, Ga., will want boiler and engine.

Boiler and Engine.—Ellington, Royster & Co., Raleigh, N. C., want a 60 horse-power boiler and a 100 horse-power Corliss engine.

Boiler and Engine.—T. J. & N. S. Wilson, Winston, N. C., contemplate purchasing a boiler and engine.

Boiler and Engine.—S. M. Schindel, Hagerstown, Md., wants a second hand 50 horse-power boiler and a 40 horse-power engine.

Bolt Cutter.—The Knoxville Brass & Iron Foundry, Knoxville, Tenn., wants a bolt cutter.

Box Factory Machinery.—Foster & Wright, Federalsburg, Md., want machinery for box factory.

Buggy Machinery.—R. W. Holcombe, Easley, S. C., will want machinery for buggy and wagon shops.

Canning Machinery.—F. H. Pulling, Millston, Wis., wants addresses of manufacturers of canning machinery.

Carriage Factory.—The Jasper City & Mineral Land Co., Jasper, Tenn., wants a complete outfit for a carriage factory.

Cars.—The Hamburg Phosphate Co., Ocala, Fla., wants dumping and tippie cars.

Cars.—The Magnolia & Southern Railway Co., F. N. Todd, secretary, Magnolia, Ark., will purchase box and flat cars.

Cold-storage Plant.—David Wing, Rogers, Ark., wants prices on cold-storage plant.

Conveyors.—The Hamburg Phosphate Co., Ocala, Fla., wants conveyors.

Cotton Gin.—M. Stoner, Atlanta, Ga., will want cotton gin machinery.

Crushers.—R. E. Lyon, Durham, N. C., wants gold quartz crushers and washers, etc.

Distilling Machinery.—M. Stoner, Atlanta, Ga., will soon want machinery for distilling grain.

Drill and Lathe.—The Hickman Lumber & Manufacturing Co., Hickman, Ky., wants a second-hand iron lathe and drill.

Electric-light Plant.—The Jasper City & Mineral Land Co., Jasper, Tenn., wants a complete outfit for an electric-light plant.

Electric-light Plant.—J. P. Thurman, Barnesville, Ga., wants estimates on an electric-light plant for a city of 2,500 inhabitants.

Electric Plant.—Gay & Hulsey, Dodd City, Texas, want prices on electric plants.

Electrical Railroad.—The Asheville Loan, Construction & Improvement Co., Asheville, N. C., wants estimates on the storage battery and trolley systems of electrical railroads.

Elevator.—The Hamburg Phosphate Co., Ocala, Fla., wants elevator.

Elevator.—M. L. Potter, Birmingham, Ala., will want at a later date a water elevator.

Elevators.—Charles T. Davis, Richmond, Va., may want a passenger elevator, either electric or water-power, and a hand dumbwaiter.

Engine.—J. B. Turnley, Chattanooga, Tenn., wants a 150 horse-power engine.

Foundry.—The Jasper City & Mineral Land Co., Jasper, Tenn., wants a complete outfit for a brass and iron foundry.

Gold-mining Machinery.—R. E. Lyon, Durham, N. C., wants a complete outfit of gold mining machinery.

Hydrants.—A. F. Benson, Batesville, Ark., wants 30 hydrants.

Ice Machines.—David Wing, Rogers, Ark., wants prices on ice machines.

Laundry Machinery.—J. W. Burke, Jacksonville, Ala., will want complete steam laundry outfit.

Lime Barrels.—The Enterprise Lime Co., Gaffney City, S. C., wants to correspond with manufacturers of lime barrels and barrel materials.

Locomotives.—The Magnolia & Southern Railroad Co., Magnolia, Ark., will purchase locomotives.

Mining Machinery.—Hamburg Phosphate Co., Ocala, Fla., wants mining machinery.

Mining Sundries.—The Hamburg Phosphate Co., Ocala, Fla., wants axes, wheels, shovels, picks, wheelbarrows, drills, black diamond steel, &c., for mining.

Pipe.—A. F. Benson, Batesville, Ark., wants one mile each of 4 and 6-inch pipe.

Piping.—W. A. Settle, Clarksville, Tenn., wants prices on 2,200 feet of one inch pipe, 16-foot lengths, 300 feet of four-inch pipe and 100 feet of two inch pipe, together with attachments.

Planing Mill.—C. B. Alexander, Emory, Miss., wants a planing mill.

Planing Mill Machinery.—Foster & Wright, Federalsburg, Md., want planing mill machinery.

Plating Outfit, &c.—The Herdeman Manufacturing Co., San Antonio, Texas, wants prices on plating outfit and polishing lathe.

Printing Press.—J. W. Purnell, Bristol, Tenn., wants a second-hand cylinder press (Hove) to print 7 to 9 columns.

Printing Presses.—The Southern Stamp & Publishing Co., Charleston, S. C., will probably purchase printing presses.

Pulleys, etc.—W. N. Barr, Louisville, Ky., wants pulleys and shafting.

Pulleys, &c.—M. Stoner, Atlanta, Ga., will want pulleys, shafting, &c.

Pulleys, &c.—The Hickman Lumber & Manufacturing Co., Hickman, Ky., will want pulleys, shafting, &c.

Pump.—M. Stoner, Atlanta, Ga., will need a pump for raising water.

Pump.—The Etowah Iron Co., Cartersville, Ga., wants a second-hand pump to deliver 1,200 gallons of water per minute at a speed of 100 feet of piston per minute.

Pump.—A. F. Benson, Batesville, Ark., wants a 500,000-gallon duplex pump.

Rolling Mill.—J. B. Turnley, Chattanooga, Tenn., wants an 18-inch muck mill and other rolling mill machinery.

Saddlery Machinery.—J. A. Mitchell, Carrollton, Ga., wants catalogues and information on machinery for harness and saddle factory.

Saw Mill.—A. W. Gills, St. Francis, Ark., wants a small saw mill for portable engine.

Saw Mill.—C. B. Alexander, Emory, Miss., wants a saw mill.

Saw Mill.—W. C. Chase, Luray, Va., wants to purchase a pony hand-saw mill.

Shingle Machine.—C. B. Alexander, Emory, Miss., wants a shingle machine.

Shingle Mill.—W. C. Chase, Luray, Va., wants to purchase a shingle mill.

Shoe Factory.—The Jasper City & Mineral Land Co., Jasper, Tenn., wants a complete outfit for a shoe factory.

Silk Looms.—S. M. Schindel, Hagerstown, Md., wants to purchase 30 second-hand silk ribbon looms.

Soda Water Machine.—W. P. McMillen, Arad, Fla., will probably want soda water machine.

Tobacco Machinery.—T. J. & N. S. Wilson, Winston, N. C., contemplate purchasing plug tobacco machinery.

Valves, &c.—W. A. Settle, Clarksville, Tenn., wants valves, vise, pipe-cutter No. 2, duplex die-stock, tongs, pipe-fittings, &c.

Washing and Drying Machinery, &c.—The Hamburg Phosphate Co., Ocala, Fla., wants drums washers, washing machinery and ore-drying machinery.

Water Motor.—The Pattillo Printing Co., Rome, Ga., wants prices on 2 to 4 horse-power water motor.

Woodworking Machinery.—W. N. Barr, Louisville, Ky., wants a planer, resaw, cut off saw, hand-feed rip-saw, self-feed rip saw, box matcher, box-board printing press, automatic self-feed nailing machines, box jointer and box blocker.

A NUMBER of the British iron-makers and engineers, members of the British Iron and Steel Association, returned last week to the Cranberry district of North Carolina and East Tennessee to continue the examination of that magnificent deposit of magnetic iron ore.

THE report that Mr. Jay Gould has acquired control of the Richmond Terminal system is not denied by the present management, and is accepted as a fact by railroad magnates and in financial circles.

Hercules Ice Machines

FOR

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Hercules Iron Works, - - - Chicago, Ill.

FIRE! FIRE!! FIRE!!!

On November 6 the manufacturing part of our works was almost totally destroyed by fire. The unprecedented heavy trade for the entire season found us short on stock and long on orders. Fortunately we had already purchased a site commensurate with the demands for Nubian at Cragin, a Chicago suburb, to which we anticipated moving in a few months. Our fire will simply expedite this removal. We have a full force at work, and expect by November 15 to 20 to commence filling orders. In the meantime we beg our customers to have a little patience. We will divide up what stock we have, so as to give everybody a little. Thanking you for past favors and assuring you we will endeavor to merit a continuance, we are,

Very truly,

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Collins Supply Agency, Louisville, Ky.

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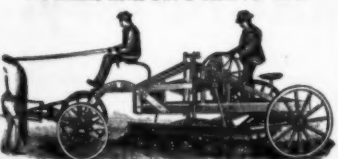
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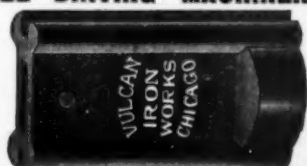
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Second-Hand Machinery Cheap.

1 8-H.P. Portable Engine and Boiler, on wheels.
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1 No. 1 Universal Grinding Machine. B. & S.
1 No. 2 Universal Grinding Machine. 40 in. bet. centers. Brown & Sharpe.
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1 Set 10 in. x 6 ft. Power Bending Rolls.
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1 Horizontal Drilling Machine.
1 Set 12 in. x 10 ft. Power Bending Rolls.

Write us for what you want and send description of Machinery that you wish to trade or sell.

THE J. A. MACKINNON MACHINERY CO.

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PROPOSALS.

UNITED STATES ENGINEER OFFICE.

WILMINGTON, N. C., Nov. 6th, 1890.
SEALED PROPOSALS for sheet piling, stone, mattresses, &c., in place in dike in Winyaw Bay, S. C., are to be received at this office until 12 M. December 15th, 1890. The attention of bidders is specially invited to Acts of Congress, approved 26th February, 1885, and 23d February, 1887, volume 23, page 332, and volume 24, page 414, Statutes at Large. All information furnished by W. H. BIXBY, Captain of Engineers.

UNITED STATES ENGINEER OFFICE.

WILMINGTON, N. C., Nov. 6th, 1890.
SEALED PROPOSALS for dredging in the Cape Fear River at and below Wilmington, N. C., and Lockwood's Folly River, N. C., will be received at this office until 11 A. M., December 15th, 1890. The attention of bidders is specially invited to Acts of Congress, approved 26th February, 1885, and 23d February, 1887, volume 23, page 332, and volume 24, page 414, Statutes at Large. All information furnished by W. H. BIXBY, Captain of Engineers.

SEALED PROPOSALS

will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 3d day of November, 1890, for all the labor and materials required to put in place complete the iron vault and closet doors for the U. S. Courthouse and Postoffice building at Pittsburgh, Pa., in accordance with the drawings and specification, copies of which may be had at this office or the office of the superintendent at Pittsburgh, Pa. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in an envelope, sealed and marked "Proposal for Vault Doors at Pittsburgh, Pa.," and addressed to JAS. H. WINDRIM, Supervising Architect. November 10th, 1890.

SEALED PROPOSALS

will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 3d day of November, 1890, for all the labor and materials required to put in place complete the low-pressure, steam-heating and ventilating apparatus for the U. S. Postoffice, &c., building at Houston, Tex., in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the superintendent at Houston, Tex. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in an envelope, sealed and marked "Proposal for the Low-Pressure, Steam-Heating and Ventilating Apparatus for the U. S. Postoffice, &c., building at Houston, Tex.," and addressed to JAS. H. WINDRIM, Supervising Architect. November 10th, 1890.

SEALED PROPOSALS

will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 3d day of November, 1890, for all the labor and material and fixing in place complete the low-pressure, return-circulation, steam-heating and ventilating apparatus for the U. S. Courthouse, Postoffice and building at Huntsville, Ala., in accordance with the drawings and specification, copies of which may be had on application at this office or the office of the custodian at Huntsville, Ala. Each bid must be accompanied by a certified check for \$100. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the Low-Pressure, Return-Circulation, Steam-Heating and Ventilating Apparatus for the U. S. Courthouse, Postoffice, &c., building at Huntsville, Ala., and addressed to JAS. H. WINDRIM, Supervising Architect. November 10th, 1890.

SEALED PROPOSALS

will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 3d day of December, 1890, for furnishing all labor and materials required for the erection and completion (except heating apparatus and approaches) of the U. S. Courthouse and Postoffice building at Helena, Ark., in accordance with the drawings and specification, copies of which may be had on application to this office or at the office of the Superintendent at Helena, Ark. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in an envelope, sealed and marked "Proposal for the Erection and Completion of the U. S. Courthouse and Postoffice building at Helena, Ark.," and addressed to JAS. H. WINDRIM, Supervising Architect. November 5th, 1890.

SEALED PROPOSALS

will be received at the Office of the Supervising Architect, Treasury Department, Washington, D. C., until 2 o'clock P. M. on the 4th day of December, 1890, for all the labor and material required for the excavation, concrete foundations, stone and brick work of the basement and area walls, first floor iron beams and girders and columns in basement for the U. S. Courthouse, Postoffice and Customhouse building at Bay City, Mich., in accordance with the drawings and specification, copies of which may be had at this office or the office of the superintendent at Bay City, Mich. Each bid must be accompanied by a certified check for \$500. The Department will reject all bids received after the time herein stated for opening the same, also bids which do not comply strictly with all the requirements of this invitation. Proposals must be enclosed in envelopes, sealed and marked "Proposal for the Excavation, Concrete Foundations, Stone and Brick Work and Iron Work for the Basement and Area Walls for the U. S. Courthouse, Postoffice and Customhouse building at Bay City, Mich.," and addressed to JAS. H. WINDRIM, Supervising Architect. November 6th, 1890.

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1 each Planer, 24 in. x 24 in. x 5 and 8 ft.
1 each Planer, 30 in. x 30 in. x 8 ft.
1 Planer, 34 in. x 52 in. x 12 ft., 50 in. x 30 in. x 17 ft.
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1 Planer, 16 in. x 16 in. x 3 ft.
1 Planer, 42 in. x 42 in. x 12 ft., with two heads.
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1 Planer, 100 in. x 100 in. x 18 ft., with two heads.
1 Engine Lathe, 22x22 ft., good order. Niles.
1 New Horizontal Boring Machine, with facing attachment, Newark Machine Tool Co., makers.
1 24x18x4-foot Planer. Ames.
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1 each Nos. 1, 3, 4 and 5 Screw Machines.
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1 No. 53 Ferracute Press. 1 Nut-facing Machine.
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10 Foot Presses, assorted. 8 Power Presses, ass'd.
12 Punching and Shearing Machines, assorted.
2 Return Tubular Boilers, 35 horse-power.
1 Bolt Cutter, each 1/2 in. to 1 in., and 1/2 in. to 2 in.
1 No. 1 Hand Millers. Pratt & Whitney.
1 Horizontal Engine each 25 and 45 horse-power.
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2 each 8 and 13-inch Slotters. Correspondence solicited.
1 Power Mortising Machine. solicited.
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49-in. x 2 ft. P. & W. Bench Hand Lathes. G. Order.
2 10-in. x 3 ft. P. & W. Bench Hand Lathes.
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1 18-in. x 6 ft. Lathe. Fair Order.
1 20x8 Engine Lathe. Good Order.
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1 26-in. Stevens Pulley Lathe. Fair Order.
1 40x15 ft. 6 in. Lathe. Not Repaired.

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1 10-in. Traveling Head Shaper. Good Order.
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1 Hendey 3 Spindle Drill Press. Good Order.
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1 34-in. Drill Presses. Good Order.
2 36-in. B. G. Drill Press. Good Order.
1 Standish Foot-Power Hammer. New.
1 Knight Punch and Shear (Comb). New.
1 12-in. Cement Slicer. Good Order.
1 Natl. Double Head Bolt Cutter. A No. 1 Order.
1 Emery Grinder and Stand. Good Order.
1 No. 1 Sturtevant Noiseless Blower. Good Order.
2 750 lbs. Steam Hammers. (Bement, Miles & Co.) Good Order.
1 Punch, 18-in. throat to punch 1 in. in 3/4 iron. A No. 1 Order.

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Will be sold at great bargain. We sell to put in more power.

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1 20-in. swing Engine Lathe, 14-ft. bed.

1 14-in. swing Engine Lathe, 7-ft. bed.

1 15-in. Crank Shaper.

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1 Water Grinder.

1 28 in. x 28 in. x 7 ft. Planer.

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1 180 h.p. Corliss Hor. Engine, cyl. 20x48 in.

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50 Upright Tub. Steel Boilers, 4 to 40 h.p. Cheap.

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1 Planer 36x36 in. x 10 ft. Bement.

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1 Planer 24x24 in. x 4 ft. Scott Bros.

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1 Iron Pl., planes 8 ft. long, 38 in. x 36 in., 2 hds. Sellers.

1 " " 7 ft. " 30 in. x 30 in.

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1 Engine Lathe, 20-ft. bed, 72-in. swing. Good.

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1 " " 6 " " 18 " " chuck.

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1 Small Turret Head Lathe.

1 24-in. B. G. S. F. Blaisdell Drill. Good.

1 20 inch Plain Drilling Machine.

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AND SWITCHES,

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Equipment of Railway and Car Works

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A NEW DEPARTURE! SECOND-HAND GOODS AT FIRST HANDS.

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NOTHING BUT THE BEST.

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I have FOR SALE a second-hand standard gauge Locomotive, Rogers build, cylinder 12 in. x 20 in., four drivers, wood burner, in good condition. Delivery in South Carolina. Full description on application. I am prepared to furnish Steel Rails, Frogs and Switches, Fish Plates, Bolts and Nuts; also new or second-hand Standard or Narrow-gauge Railway Equipment.

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**Keep Your Belts From Slipping,**

And Save Your Power by Using Friction Covering for Pulleys.

Satisfaction Guaranteed. Easily Applied. No Rivets. Effective.

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20 Second-Hand Narrow Gauge Passenger Coaches.
20 Second-Hand Standard Gauge Passenger Coaches.
30 New Standard Gauge Passenger Coaches, all modern improvements. Price \$3,700 each.
40 Second-Hand Single Horse Cars and 30 Double Open Horse Cars. New York delivery.
Wm. B. Pollock & Co.'s Oil Tank Cars for sale at lowest possible prices. Photos and specifications sent with prices if desired.

40 Second-hand Narrow Gauge Locomotives. Different sizes.
60 Second-Hand Standard Gauge Locomotives. Different sizes, good condition.
270 tons of new 60 lb. steel rails with fastenings complete. Offer wanted.
1,000 tons of 40 lb. second-hand steel and iron rails.
800 tons of 35 lb. iron and steel rails. Good order.
1,000 tons of 30 lb. steel rails, ostensibly as good as new. American, Ga., delivery.
Also materials railroads use, and bonds negotiated on good roads.

Estimates Furnished for Electrical Equipment Under Latest Improvement.
Bonds Negotiated on New and Old Roads, Long Roads Preferred.
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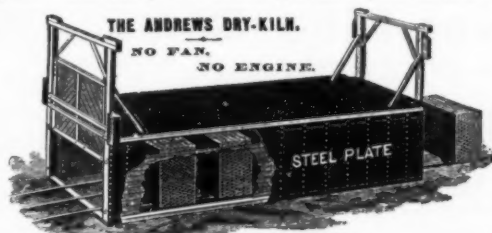
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The Andrews Dry-Kiln.

The accompanying cut illustrates the appearance of an improved Andrews dry-kiln, now so extensively used throughout the lumber sections of the South. It is claimed by the manufacturers, and verified by some of the users of the "Andrews kiln," that the process, besides duplicating nature, saves money in every one of the following items, viz: In time, capital, interest, insurance, yard-room, freight, material, labor and expense, and is so guaranteed.

The necessity for a practical method of drying lumber cheaply and still retaining it in the best condition is well understood by some dealers and manufacturers, while many others are yet ignorant and skeptical as to the best means of obtaining the end, or whether, indeed, any system of artificial seasoning is desirable. Various processes and kilns built on different principles have been tried within the last 15 years. Many systems have proved to be either failures in the quality of work done, or so expensive and troublesome to operate as to



be impractical. A solution of the question involves much more than the direct application of heat to green lumber. Neither furnace nor "fire-heat" crudely applied, nor the much-vaunted "hot blast" from a "blower" will ever fulfill the conditions required of a perfect lumber-dryer is the claim made by the manufacturers of this kiln.

The drying of lumber is a process, and there must exist a proper system for its fulfillment. In the Andrews dry-kiln a perforated pipe is introduced under the lumber, so arranged that the air can, at the pleasure of the operator, be impregnated with a moisture which penetrates and permeates evenly the whole mass of lumber, moistening and softening the surface. This is very advantageous where green or case-hardened stock is to be dried.

The Andrews kiln is arranged to use either live or exhaust steam or both in combination, according to results wanted. The Andrews kiln has a hollow inner wall, reaching nearly to the ceiling, and a tight outer wall of sheet metal. The space between these two walls forms a down-flue communicating at its foot with a large flue at the bottom of the kiln. Above the openings of the bottom flue are the steam coils which furnish the heat.

The lumber is placed upon cars outside the kiln and rolled in on tracks. The cars stand directly above the coils, and close enough to get the advantage of the radiant heat. The air from the heaters passes up slowly through the lumber, taking up moisture from it, and then goes over the inner wall down the side flues to the bottom. On its way down, as it comes in contact with the sheet-metal outer wall, its moisture condenses on the cool metal and trickles down. By means of small gutters on the inside of the metal walls near their foot the water is conveyed out of the kiln. The air, having thus parted with much of its moisture, passes through the bottom flue to the coils to be heated again, its comparative dryness now making it more effective than common air for this purpose; yet this air is so tempered with moisture that no dry heat comes in contact with the lumber. This circulation goes on continuously. In a few hours after water ceases to flow from the gutters the lumber can be removed.

All kilns sold are furnished with automatic fire-sprinklers, which do away with any possible danger from fire, thereby lessening fire risk, a point that fire insurance companies have for a long time been trying to impress upon lumbermen and manufacturers of wood work.

The Andrews kiln is guaranteed to season one-inch green pine in three days, and one-inch oak and other hardwood lumber that is 60 days old from saw in four days of continuous operation, and to do it so well that lumber taken from kiln can be immediately worked up into the finest furniture or office fittings. The lumber from this process is said to be natural in color, bright and lively. It remains straight when sawed, works freely, takes up glue, and takes finish as well as when dried by the most careful open-air seasoning. For further information address A. H. Andrews, 215-221 Wabash avenue, Chicago, Ill.

CIRCULARS numbered 28, 29 and 30 have just been issued by A. S. Males & Co., of 15, 16 and 17 Etna Building, Cincinnati,

Ohio. The first is of bargains in logging outfits; No. 29, of rolling stock for regular and mining railroads, etc., and No. 30 relates to outfits for dummy lines. Intending purchasers of any of this class of machinery will find these circulars of great assistance, and they will be cheerfully forwarded on application.

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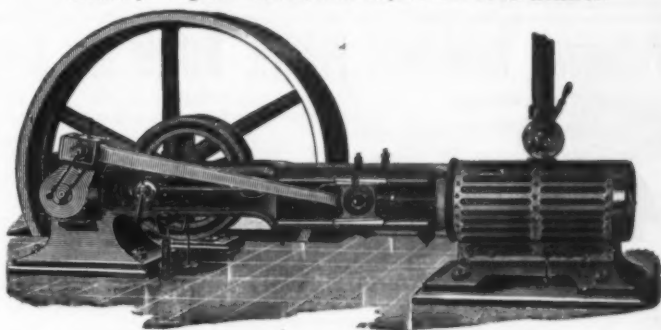
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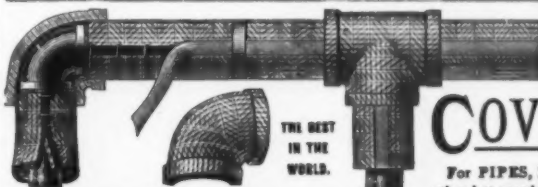
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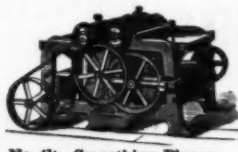
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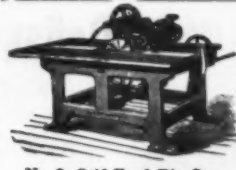
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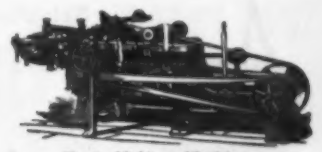
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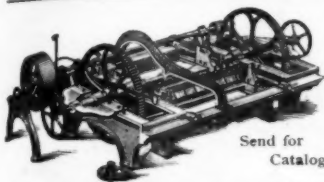
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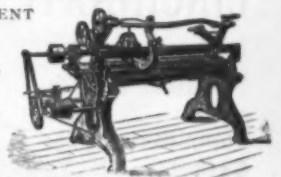
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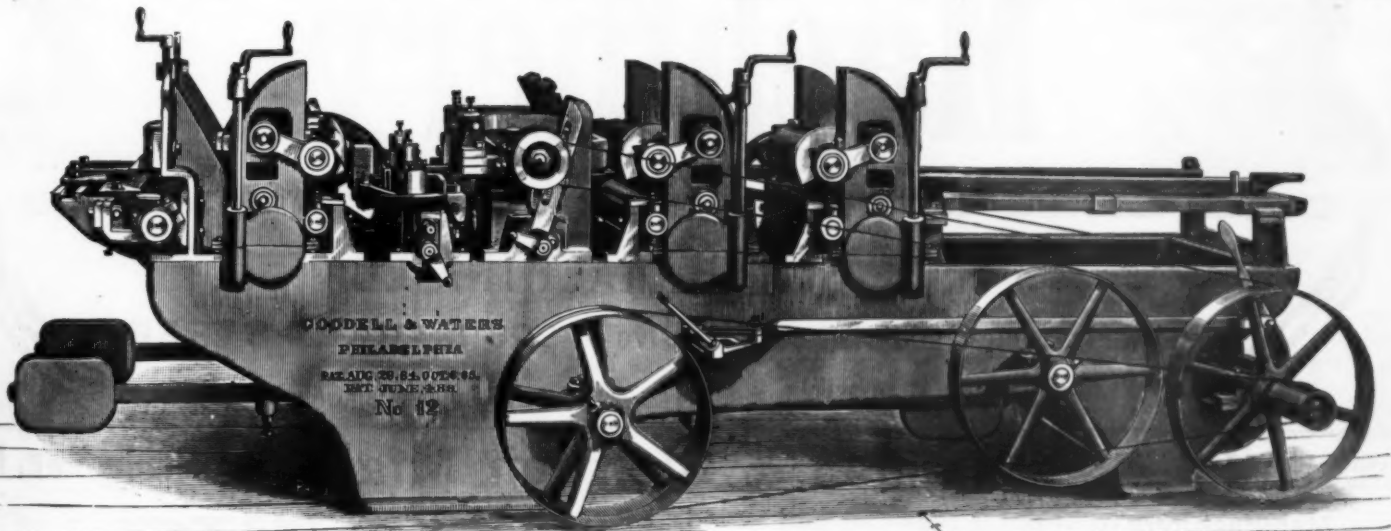
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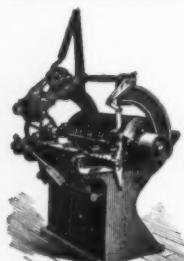
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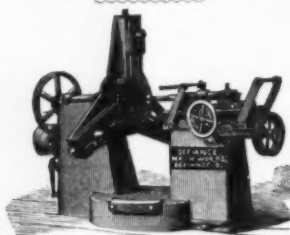
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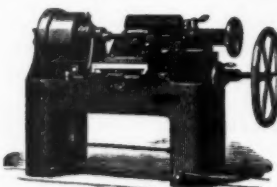
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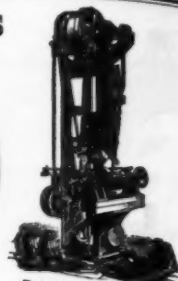
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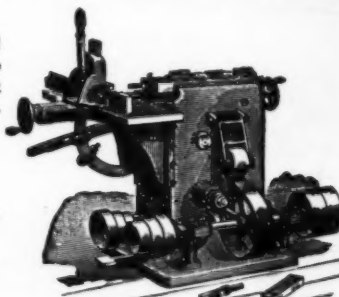
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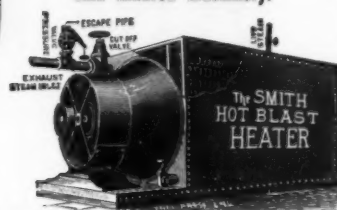
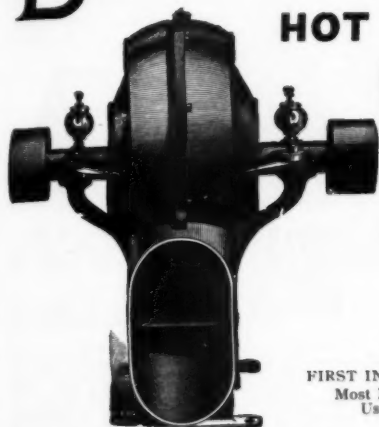
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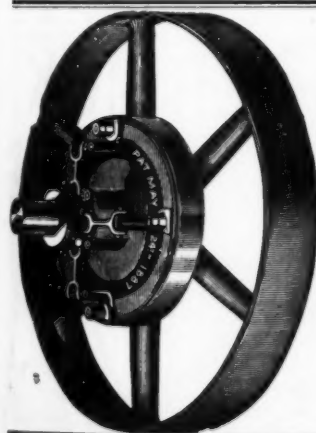


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In the Stilwell patent improved heater, herewith illustrated, its manufacturers claim to offer just such a device, and they further assert they have successfully met all the objections hitherto urged against open heaters. Briefly stated the following advantages are claimed: 1. Very large heating and filtering capacity, and also depositing surfaces for receiving the deposits of lime and other impurities; 2. Increased facilities for quickly and thoroughly cleaning the heater; 3. Effectual devices for separating and catching the cylinder oil contained in the ex-



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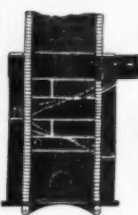
haust steam, and 4 Automatic regulation of the inflow of cold water, thus insuring an even and steady feed.

A finely illustrated descriptive catalogue can be had upon application to the manufacturers, Stilwell & Bierce Manufacturing Co., Dayton, Ohio, who for more than a quarter of a century have made a specialty of machinery for heating and purifying feed water for steam boilers, a fact which entitles their claims to careful consideration.

A CHARTER was issued at Springfield, Ill., last week to the Baltimore Tin-Plate Co., with an authorized capital of \$2,000,000. This company is said to have acquired 1,000 acres at Park Ridge, a suburb of Chicago, where an enormous plant will be erected for the manufacture of tin plate and of all kinds of utensils made from it. It is also stated that this will be the first of half a dozen such establishments to be located at central points through the country by a very wealthy corporation.

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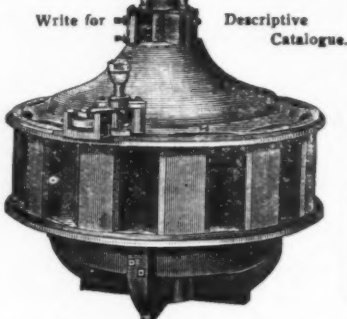
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Leesport Iron Co., Leesport, Pa.....	2
Total.....	107

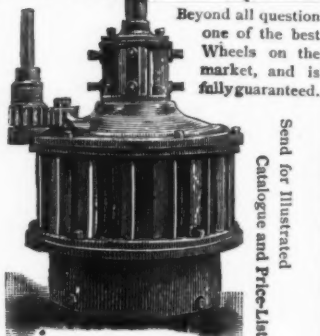
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Manufacturers of the well known

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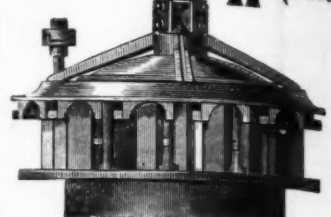
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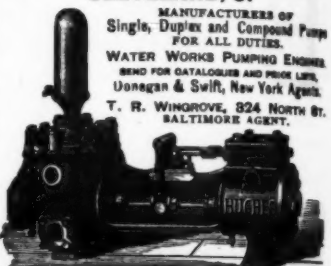
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IRON, CLAYS AND TIMBER
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Large Steel Plant—400 tons daily capacity—constructed by Kelly, Bellefont and Norton Nail Works; Superior Water Works, Street Cars, Electric Lights, and ample Church and School Facilities. Town lots and acreage property on the market at very low rates. Liberal inducements offered meritorious concerns.

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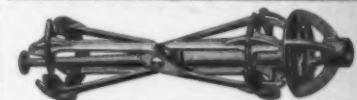
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is the best in the market. Why? Because the ends are protected from breakage by the button; its native flexibility entirely supercedes the old springs; the only cleaner with a follower to remove the refuse. Quicker and more easily adjusted than any other; better made; does better work; lasts longer.

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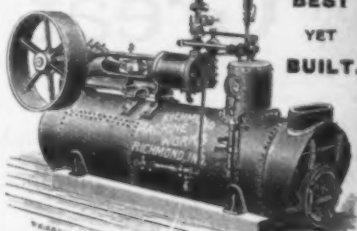
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this new year, are prepared to deal liberally for the founding of Iron and Woodworking industries in this growing Mining and Manufacturing Center.

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* *Good Industrial Plants* *

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Beautiful town-site, several hundred acres covered with ornamental trees; 10,000 city lots.

Best of building material—limestone, building stone, brick clay, etc.

Manganese in great quantities has been discovered within the past few weeks.

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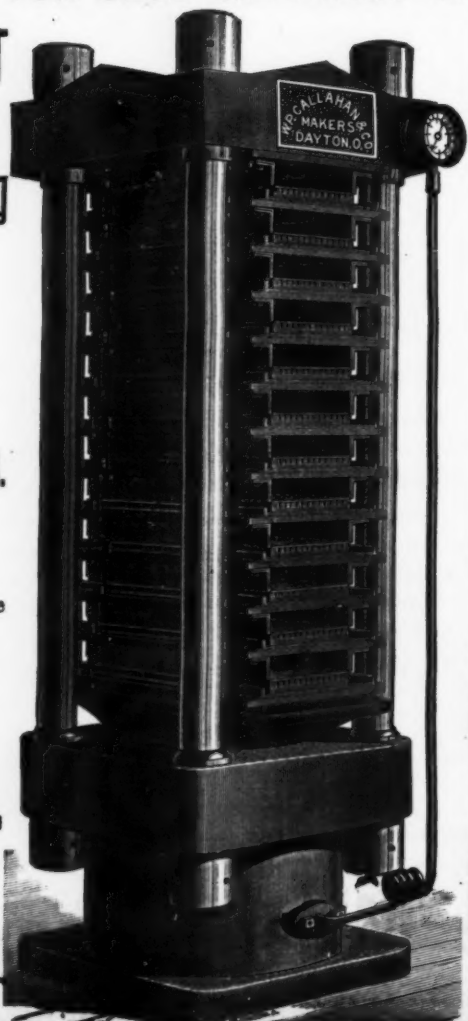
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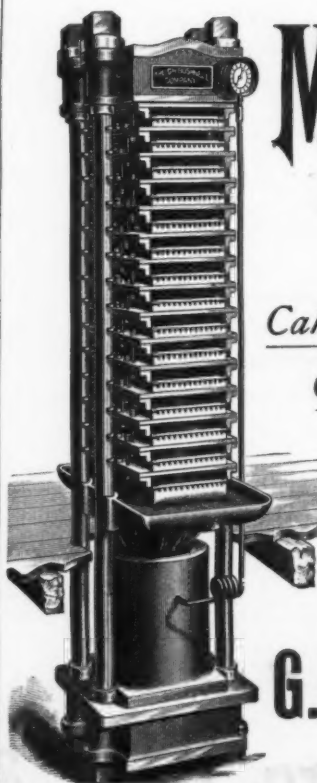
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WORCESTER, MASS. COTTON, WOOLEN, SILK.
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ESTABLISHED 1873

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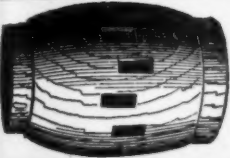
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These Hubs are made in sizes from 6x8 to 16x18 inches, and are especially adapted to dry climates.
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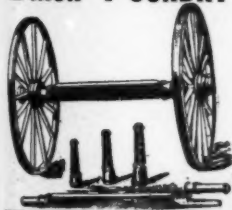
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For Fitting Cast Iron or Steel Skeins.

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Three sizes, with and without Crusher Rolls.

BUILDING, PAVING AND FIRE BRICK,

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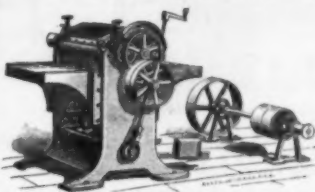
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DESIGNERS AND BUILDERS OF

Woodworking Machinery,

Nos. 26 to 36 Butler Street, Cincinnati, Ohio.

Estimates made on Entire Outfits for Planing Mills, Sash, Door and Blind Factories Furniture, Chair and Bracket Factories, Wagon, Carriage and Agricultural Shops.



PATENT PLANER AND SMOOTHER with self-adjusting pressure bars and weighted feed rolls. Built 18, 24, 26 and 30 inches wide.

Send for illustrated catalogue and special cash price list.

All Machines Tested and Warranted to be First-class in every respect.



No. 2 BAND SAW. Wheels 36 inches diameter.



PREMIER FLOUR OF AMERICA.

Patapsco Flouring Mills.

ESTABLISHED 1774.

PERFECTION IN FLOUR.

PATAPSCO SUPERLATIVE PATENT,

THE PREMIER FLOUR OF AMERICA,

IS UNSURPASSED FOR BREAD, BISCUIT OR PASTRY.

ASK YOUR GROCER FOR

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ROLANDO CHOICE PATENT, ORANGE GROVE EXTRA.

C. A. GAMBRILL MFG. CO.

Office, 214 Commerce Street, Baltimore, Md

Iron! Cotton! Leather!

Goods made at the point both of production of the raw material and consumption of the manufactured article, with cost of making comparatively low, must return best profits.

BLUFFTON

At the "IRON BLUFFS," Northern Alabama,

surrounded by furnaces making the best of foundry and car wheel iron; in a county producing 10,000 bales of cotton; with large tanneries nearby, and with the great unoccupied market of the South and Southwest at its door, offers the above advantages to investors in manufacturing industries, and will give liberal subsidies of land to support the stock of companies located there.

LIBERAL AID TO SMALL INDUSTRIES.

Address BLUFFTON LAND, ORE & FURNACE CO., Bluffton, Ala.

Look Carefully through this paper and you may find an advertisement of some machinery or other goods that you are in need of. Preserve this copy for future reference

New Centering Machine.

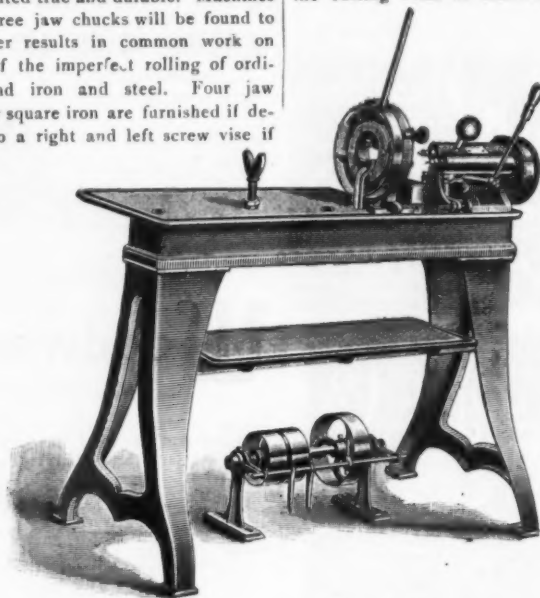
The D. E. Whiton Machine Co., New London, Conn., have added to the great variety of improved gear-cutters, centering machines, lathe and drill chucks manufactured by them, a new centering machine, already very popular, and which, by virtue of its many good points, promises to become even more so.

The special improvements noted in this machine are lucidly set forth in a pamphlet issued by the manufacturers, and are as follows:

"Two spindles are provided in the machine, one of which carries a drill and the other a reamer or countersink. They are driven at different speeds by a single belt over a pulley, whose center is in line with the center of the lateral movement of the head. The belt tension does not vary, and exerts no strain tending to change the position of the spindles. Both spindles are balanced by springs as in sensitive drills, but are not subjected to wear by the pressure of these springs, which do not bear on revolving parts. As regards the convenient feed of this machine, the spindles are successively advanced to their respective cuts by a feeding lever, which is always in the same position, and which has the same direction of feeding motion for both spindles. The head is moved laterally by the convenient ball handle shown in the cut. Positive stop motion is assured by both spindles being provided with fixed collars inside the head, so arranged as to limit their advance at the same point. In connection with other arrangements hereinafter explained, this feature prevents inexperienced workmen

carefully made universal scroll chuck, with ample wearing surfaces, steel scroll and hardened jaws, which may be readily ground true whenever necessary.

A long experience has proven this form of vise to be easily kept true and in alignment with the spindles, and the machines are warranted true and durable. Machines having three jaw chucks will be found to give better results in common work on account of the imperfect rolling of ordinary round iron and steel. Four jaw chucks for square iron are furnished if desired; also a right and left screw vise if



NEW CENTERING MACHINE.

preferred, at a slightly increased cost.

By an improved arrangement a support is provided for the front end of the bar, while it is being inserted in the chuck, in addition to the V-shaped rest for the rear end. The chuck is thereby made self-

controlled by the stop screw shown in the cut. The vise is also provided with a stop which may swing into the path of the work and limit its approach toward the cutting tool. By a simple adjustment of the stop screw above mentioned, the work may be brought far enough into the path of the cutting tools to receive the desired

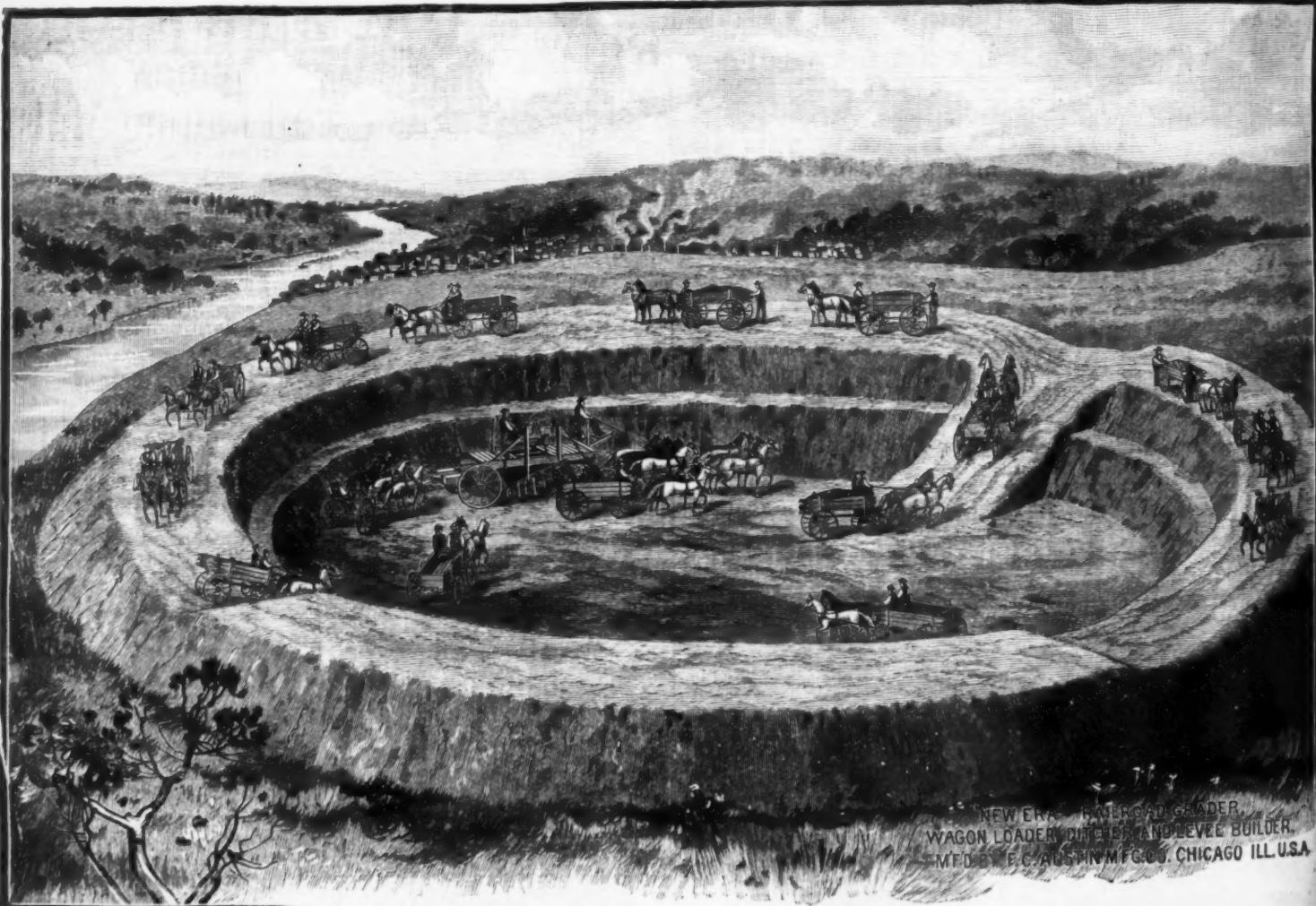
depth of reaming. When the vise is properly adjusted, all danger of reaming too deep is averted, and perfect uniformity of the work is secured. The stop may be swung up to admit any special work when desired. The stop plate referred to has an

The New Era Grader.

In this progressive age of labor and time-saving devices, contractors for railroad building, ditching, irrigation and kindred work should feel grateful to the inventors of this wonderful grader, that has so many uses that when fully known to the world will be used universally.

This illustration is one of many that we find in the handsomely illustrated catalogue issued by the F. C. Austin Manufacturing Co., of Chicago, whose advertisement may be found elsewhere in our columns. We present this because we are advised that this work is now being done on a large scale by D. J. Conger, contractor, for the New Albany Water Works Co., at New Albany, Indiana.

Adjoining the present reservoirs of the company, situated on the heights overlooking the town, Mr. Conger is building a new reservoir larger than the three that were constructed earlier. Mr. Conger first plows off the surface of the sod, roots and loose earth down to the solid clay, then begins his excavation and places the earth in embankment. The cut represents the New Era loading common wagons with dumpboards. The New Era people are now building a special dump wagon, carrying 1½ yards of earth, which, at the will of the operator, dumps its entire load instantly, consuming no time except in going and returning, and will accomplish twice as much work as common wagons. When one considers the multiplicity of uses for which the New Era seems to be especially adapted, its growing popularity as an earth-moving appliance is readily understood. Doing its work more cheaply, rapidly and better than can be otherwise done, it is only a question of time when, on all work free from roots or rocks of sufficient size to



NEW ERA GRADER.
WAGON LOADER, DITCHER AND REVEE BUILDER.
F. C. AUSTIN MFG. CO. CHICAGO ILL. U.S.A.

from reaming the work too deep.

The machine is so arranged that neither spindle can be advanced by the feeding lever except at the central point. The moment this advance is begun no lateral movement of the head is possible, nor is lateral movement again possible until the return of the spindle to its normal withdrawn position. The improved vise is a

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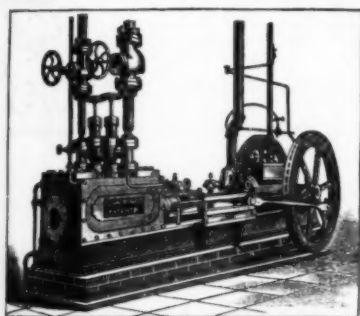
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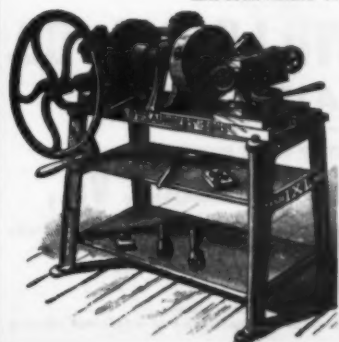
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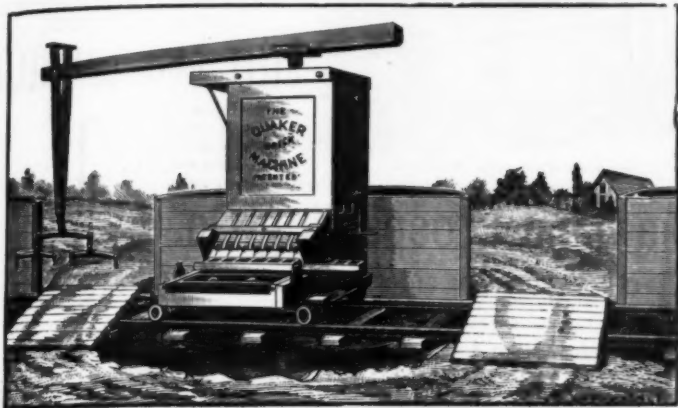
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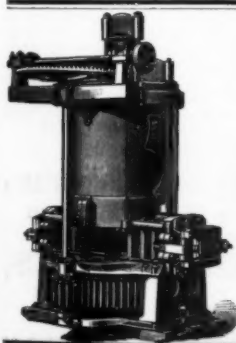
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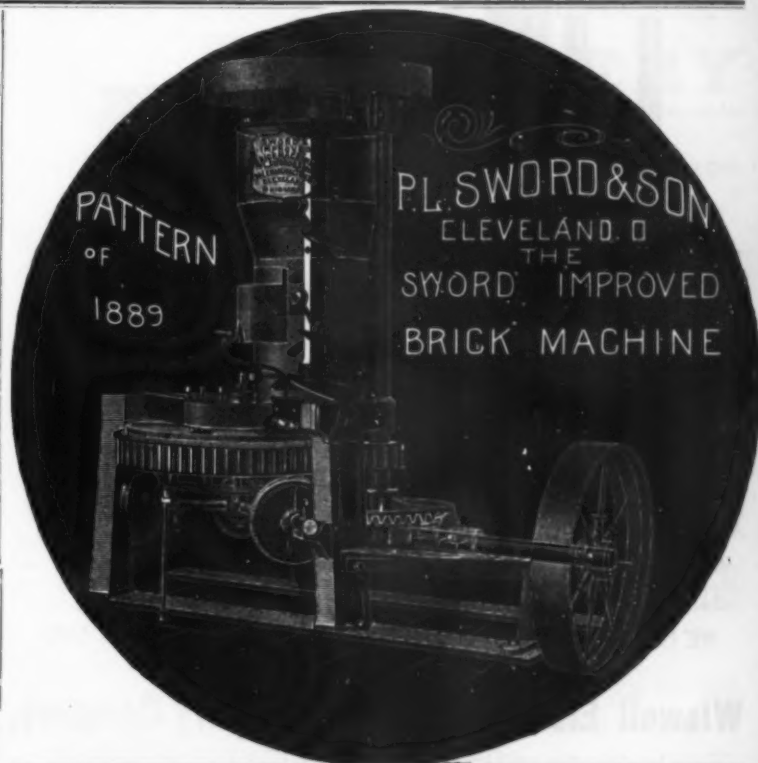
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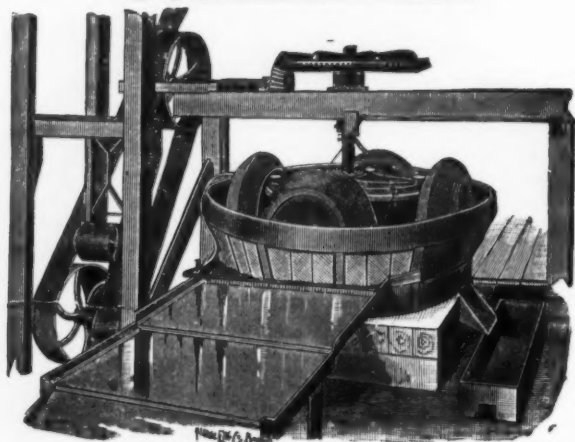
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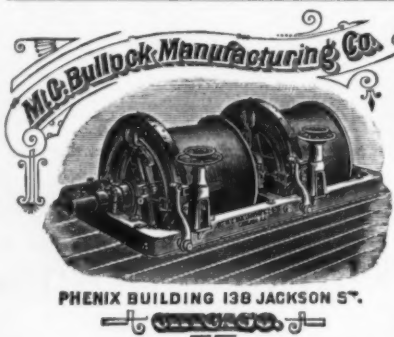
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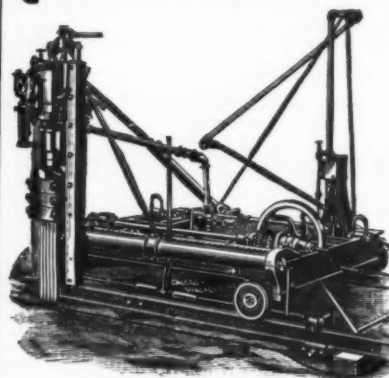
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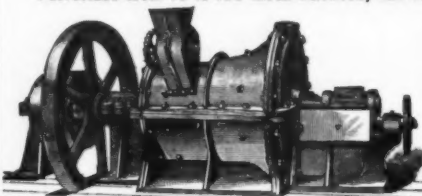
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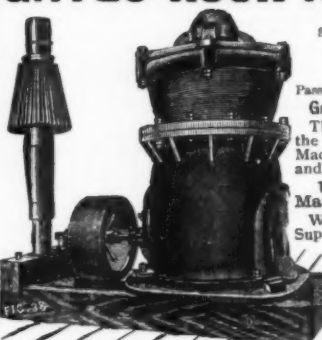
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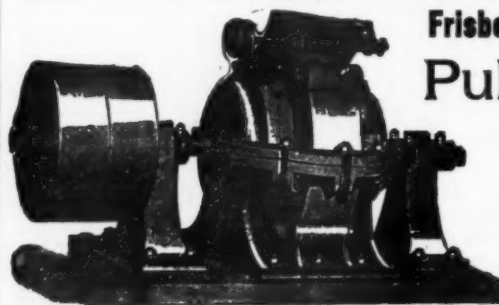
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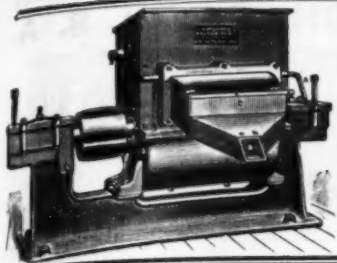
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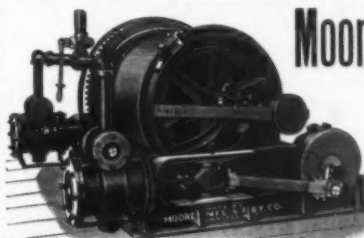
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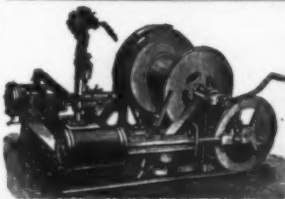
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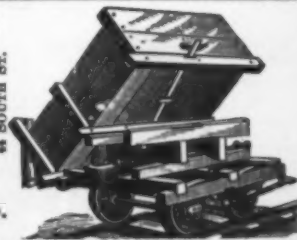


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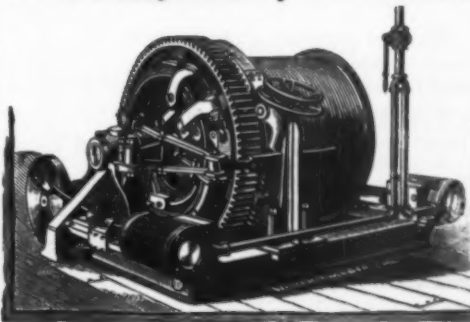
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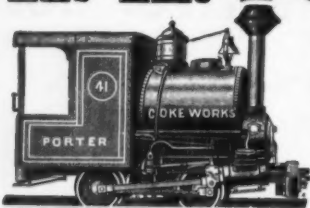
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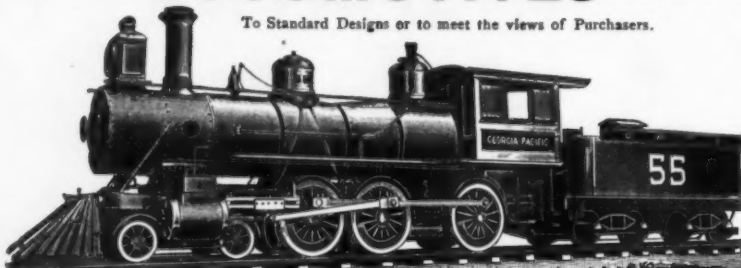


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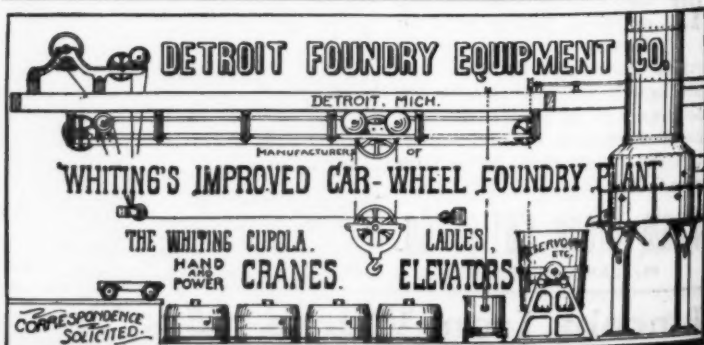


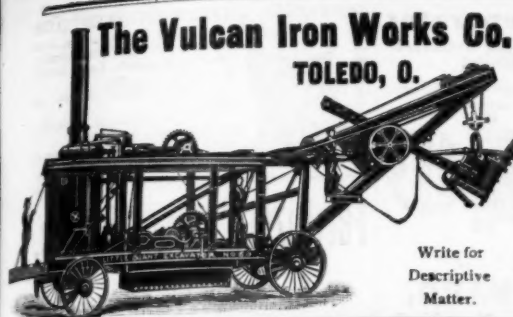
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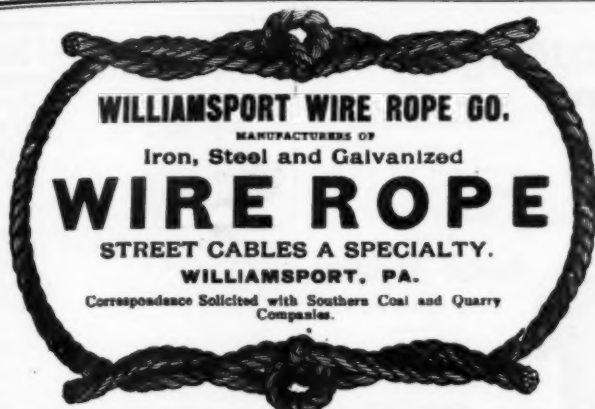


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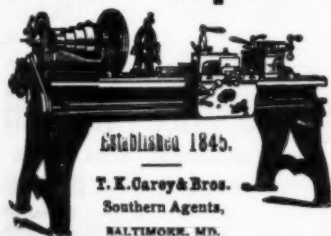
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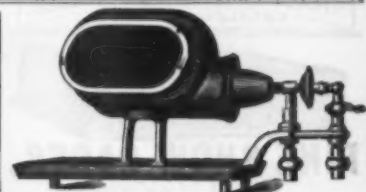
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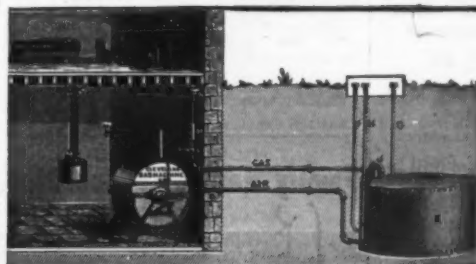
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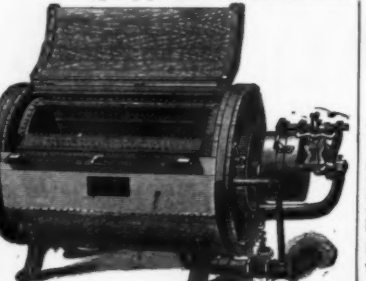
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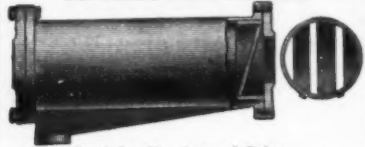
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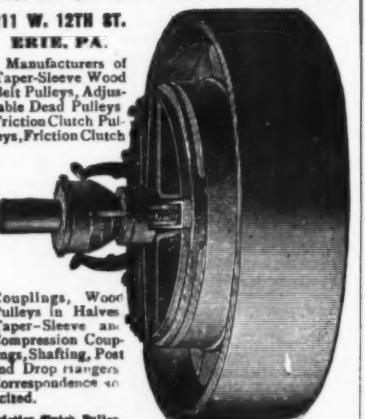
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Send for catalogue and mention this page.

American Shears.

A retrospective glance at the export and import trade of the United States furnishes an interesting study of the progress of certain industries in this country. Many articles in the early days of commercial

cess of producing malleable iron, and, acting as a strong incentive, resulted in the commencement of the shear and scissor industry, which now has assumed extensive proportions, and has the world for its field of operation. The English process of forging from bars of soft steel

this industry is due in a great measure to the efforts of the old-established firms in the business, who, confident of the ability of American materials and labor to equal if not excel any competitor, actively proceeded to introduce their goods to both the home and foreign trades. The Henry

addition every pair is warranted. Attention is not only paid to making a perfect article, but also a regard is shown for the beautiful, and many of the styles made prove that even in so ordinary an article as shears and scissors effects can be produced that combine usefulness with beauty. The company will, to introduce its goods to



intercourse were obtainable only in foreign lands. Especially is this so of the universally used scissors and shears. Prior to about the years 1835-40 the country was dependent upon England and Germany for the supplies of these tools. About the latter year mentioned was discovered the pro-

cess of producing malleable iron, and, acting as a strong incentive, resulted in the commencement of the shear and scissor industry, which now has assumed extensive proportions, and has the world for its field of operation. The English process of forging from bars of soft steel

styles now made by the Henry Seymour Cutlery Co. Two hundred and seventy-five kinds and sizes are made, from the smallest four-inch pocket scissors to the heavy tailor's shears 16 inches in length, at the rate of 2,400 to 2,600 dozen per month. The goods are carefully inspected, and those having the slightest imperfection are thrown out and branded as seconds. In

the middle of the blades or cutters. The two levers or handles are pivoted to each other and have a recess between the sides between which the rivet or wire can be passed and can thus be cut square off, making a novel arrangement of special importance, as it is designed to protect the blade in its weakest part and makes the desirable diagonal cut easy to rivet. Further particulars, prices, etc., may be obtained on application to the makers.

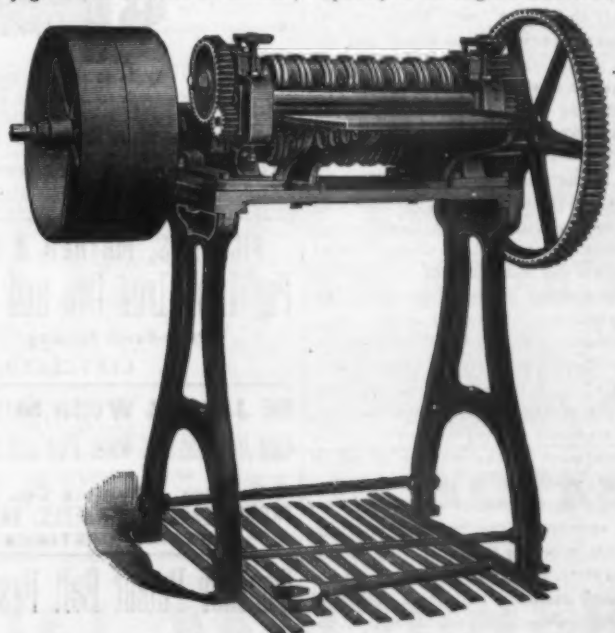


Seymour Cutlery Co., of Holyoke, Mass., which dates its origin back as far as 1839, is, by reason of the quality of its goods and the large trade it has built, in the front rank of American manufacturers of shears and scissors. This concern has invaded all quarters of the globe with its manufacture, and located an agency at Sheffield, Eng., aptly illustrating the force of the often used quotation of 'carrying coals to Newcastle.' On this page are shown a few of the many

retail merchants who do not now sell them, send for \$1 by mail three pair of its celebrated shears and scissors.

A New Wire-Cutting Nipper.

The cut herewith illustrates a new wire-cutting nipper now placed on the market by the Niagara Stamping & Tool Co., of Buffalo, N. Y., under letters patent. The makers claim for this that rivets, wire, etc., can be cut to any desired length squarely to the length of the same, and at



NEW WIRE-CUTTING NIPPER.

The Markets.

OFFICE MANUFACTURERS' RECORD,
BALTIMORE, November 19, 1890.

The depression in financial and speculative circles abroad has reacted somewhat in American business circles, but, fortunately for us, serious results are not anticipated. The probabilities are that the lesson learned by British investors will be of use and lead to more careful investments in the future. There are prospects for a permanently better understanding among railway and banking interests, for as railway interests are now managed, they go hand in hand. The possibility of a financial stringency has led to a restriction of commercial operations and to somewhat more careful buying, but otherwise matters are about as they were a week ago.

The iron trade has not suffered perceptibly, and for the reason that an enormous amount of material is needed for the prosecution of work on hand. It is, of course, possible that new enterprises may not be entered upon as earnestly, but even such a prediction as this would be premature. Of one thing it can be safely asserted, viz: that when railroad interests are harmonized, that railroad building will be revived, and a natural conclusion from this is that prices of iron and steel products would then harden, unless production was unduly increased.

The crude iron markets throughout the country are moderately active. Prices remain strong, and there is no desire shown to throw stocks on the market. Southern iron is more readily sold in Northern markets than delivered, owing to the demand for rolling stock, especially on roads in the cotton belt, for the carrying of cotton, which pays better. Southern No. 1 is selling at \$17 in Northern markets, and \$16 for No. 2, with variations for quality. Alabama companies keep well sold up, and even at the advanced figures recently announced. Charcoal, Bessemer and all kinds of irons are doing well in Northern markets.

Rolling mill capacity is busy everywhere, and so far there is no perceptible diminution in orders. Prices are pretty well maintained on bars, plates, sheets, skelp, pipe, rails, billets and all other products. There is a heavy legitimate demand which keeps mills full and prices firm. Manufacturers have been somewhat concerned lest the activity would terminate and low prices overtake the market. It is true competition is working in favor of buyers, but there is still a safe working margin.

Bridge, boat and car builders are large buyers of material, especially in Western markets. Wire and cut nails are meeting with good sale. Season hardware moves off briskly. Manufacturers of agricultural implements and boiler and engine builders have been active buyers of material. An important source of demand is material to make machinery and mill and shop equipments. Much machinery is finding its way Southward, and machine shops in many places are making 12 to 14 hours per day.

The steel-rail makers confess to a little disappointment in the manner in which steel-rail orders come in. A rush was looked for as a result of a drop in price to \$29 and less. The banking interests, which are in reality the controlling factors in the matter, are against any more wild or ill-advised railroad building. The rail mills are, however, comfortably well off for work under the widening demand for steel.

Our advices from several Western and Southern iron centers justify the statement that present conditions and prospects are favorable. Buyers continue to show an unwillingness to enter into long-running contracts, believing the safer policy to be to buy material as needed. Production and consumption are evenly balanced, and no sudden fluctuation in prices is likely to occur. At the present rate of industrial progress in the South there will be no great surplus of iron for Northern markets.

HARDWARE.

The volume of trade continues satisfactory, the generally favorable weather admitting of the gathering of various crops, consequently insuring a steady demand for many leading lines, which conditions will probably characterize the remainder of the season. Prices remain firm and there are few important changes except in copper, brass and zinc goods, which have advanced about 10 per cent. We have confidence in the present range of values, and anticipate but slight variations during the next few months. Owing to the temporary money stringency, collections are backward, the state of uncertainty checking payments even by those of ample means. This, however, will only last for a short time and financial matters resume their ordinary condition.

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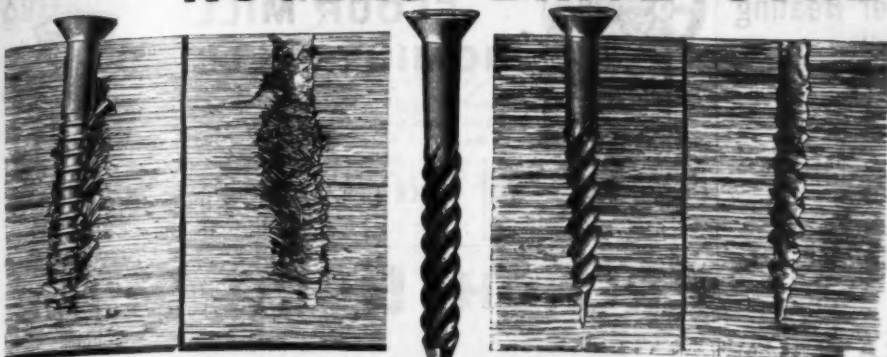


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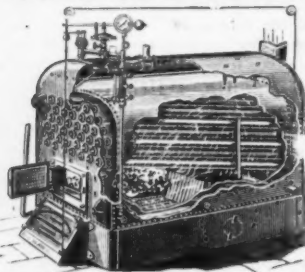
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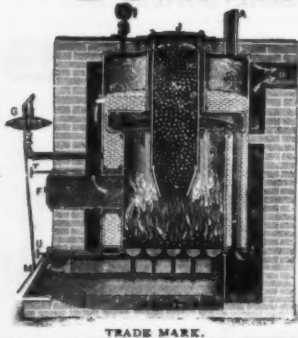


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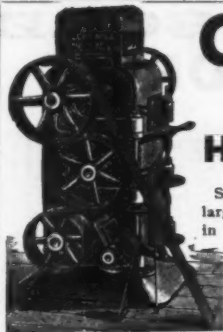
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Eastern Lumber Markets.

[Special Cor. MANUFACTURERS' RECORD.]

NEW YORK, November 18, 1890.

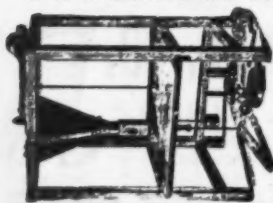
Reports from many quarters very recently to hand afford proof of a general activity in lumber among retail dealers and builders. House-building is being brought to a close in nearly all large cities. Building operations, so far as tables have been made up, show a greater outlay than last year. The New York account foots up over \$70,000,000. In Philadelphia this year over \$30,000,000 have been spent in building. So it goes. It is therefore no wonder that the lumber business has been good. There has also been fewer and less violent fluctuations in prices this year.

The New York and Boston lumber-yards are pretty liberally stocked with all kinds of lumber, but not overcrowded. The wholesalers are not offering to sell under price, and retailers are not trying to empty their yards at any price just for the sake of doing business. Our stocks of yellow pine show that greater care has been exercised in their selection. Refuse stuff has been pretty well cleaned out.

Hardwood dealers have been receiving quite liberal supplies of poplar, ash and cherry, but all buying is done very carefully. The margin on lumber is not heavy, and dealers aim to carry no more than a sufficient supply and assortment of salable stocks. Walnut boards have been selling more freely. Nothing but good poplar is now called for. Ash is dull. Cuban and Mexican mahogany is in good supply. New England yards are quite well stocked with pine, hemlock and the hardwoods. New York State and Pennsylvania dealers have transacted a good and profitable business. The country trade has been good this season in those States. All our advices from Western lumber centers confirms what has been said heretofore concerning prices and supplies. Lumber interests are in a sense becoming more centralized. There are fewer small operators to flood the market and unsettle values. Then the market requirements are more carefully studied, and by men who control the lumber supply. This accounts for the greater regularity in prices.

Business is active at Albany, Buffalo and Tonawanda, considering the lateness of the season. Large quantities of lumber are being handled by the retail trade in Chicago. The Michigan lumber interests contemplate a heavy log cut this next season. Throughout the West stocks have been pretty well run down, and manufacturers feel safe in starting next year with large stocks. Arkansas is becoming quite a lumber-producing State, and Texas is coming to the front as railroads open up new territory. Lumber men feel that with the expansion of industry throughout the South and West, their market will grow sufficiently fast to keep them busy at paying prices.

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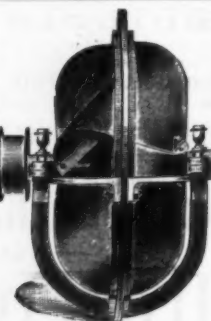
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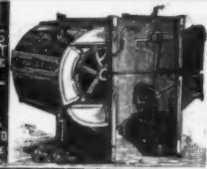
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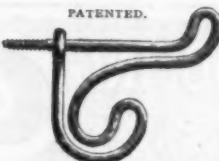
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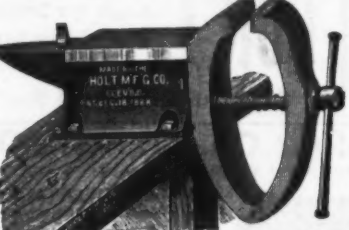
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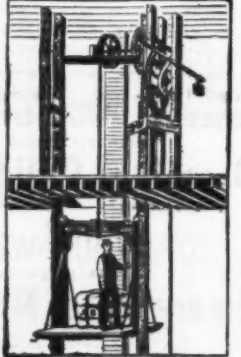
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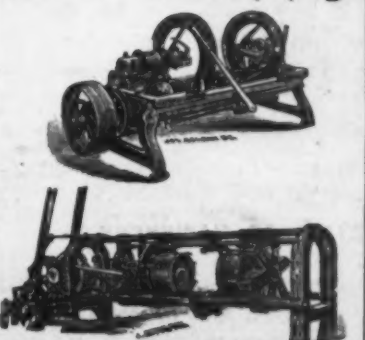
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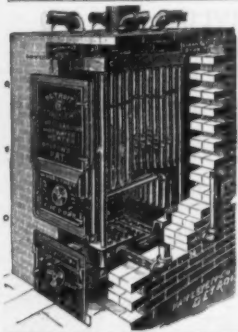
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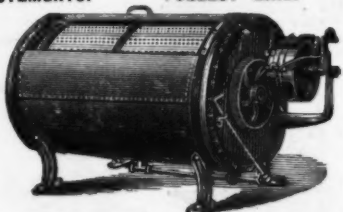
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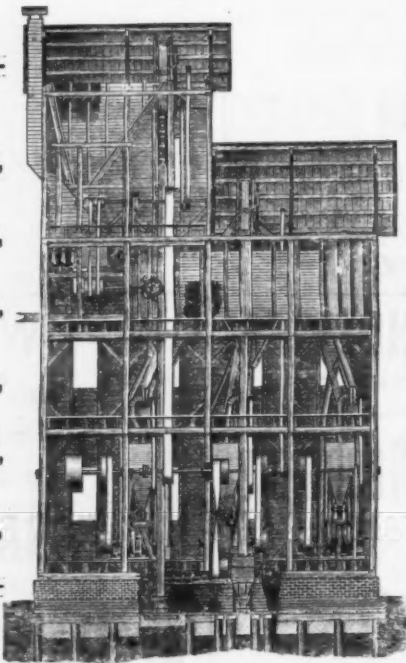


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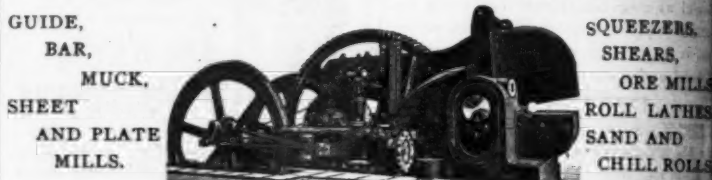


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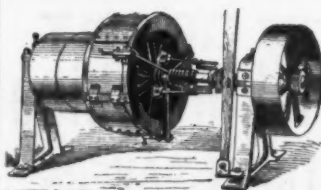


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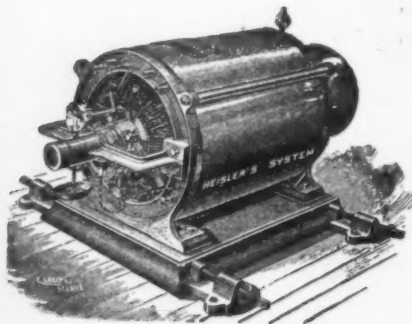
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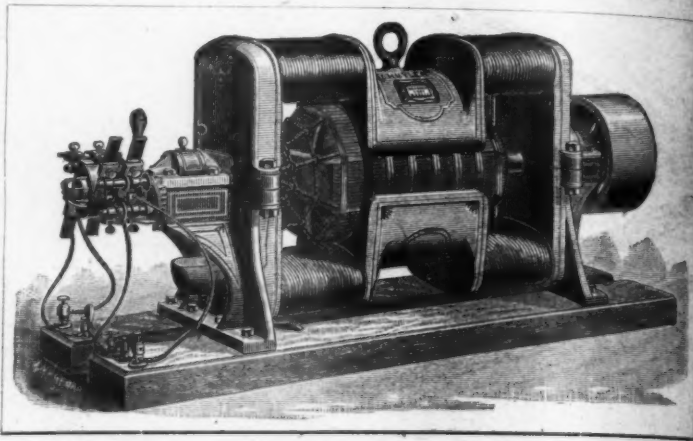
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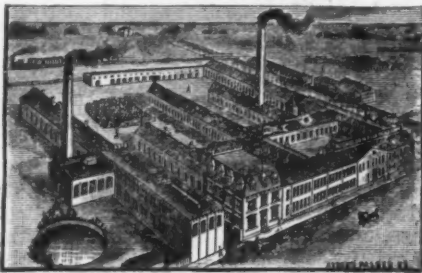
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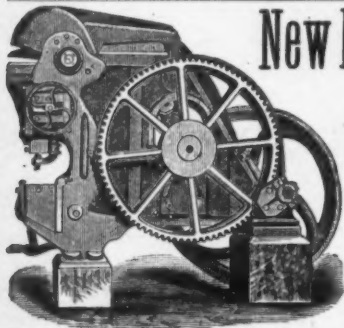


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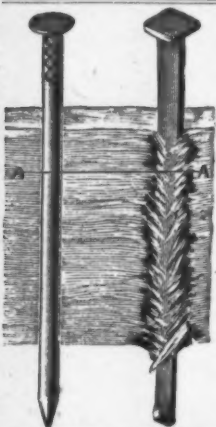
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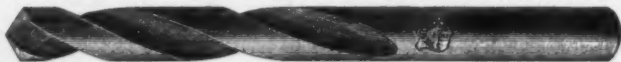
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